THE UNIVERSITY OF ALBERTA

LEADERSHIP EFFECTIVENESS AMONGST C.I.A.U. MALE BASKETBALL COACHES

By

© Donald George Horwood

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled LEADERSHIP EFFECTIVENESS AMONGST C.I.A.U. MALE BASKETBALL COACHES submitted by Donald G. Horwood, in partial fulfillment of the requirements for the degree of Master of Arts.

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ABSTRACT

The study examined twenty-five coaches of male Canadian Interuniversity Athletic Union basketball teams as to their leadership effectiveness. Leadership effectiveness was determined by percentage of wins in league play and the number of championships won. Specifically, coaches were asked to indicate their orientations on a number of questions. These included data on their training, experience, leadership style, relations with team members, role perception, rating of peers and self-rating of effectiveness.

Pearson Product Moment Correlation Coefficients and point biserial coefficients were computed to test the various possible relationships. Significance was accepted at the .05 level of confidence.

Descriptive data provided general characteristics of the group. The average age of the coaches was 40 years and 32 percent were born outside of Canada. Their average head coaching experience was 10 years and 100 percent had at least a bachelor's degree or equivalent. Sixty-four percent were physical education majors. Eighteen coaches were married and 17 had at least one child. Twenty percent of the sample had been divorced. Thirty-six percent reported winning at least one coaching award during their head coaching years. Fourteen of the coaches had tenure at their University. The average

winning percentage was 57.

On the basis of the data provided, the following conclusions were reached:

1. There is no relationship between the measures of coach effectiveness and coach leadership style, degree of authoritarianism, coach-player relations, coach experience and time spent on coaching in season and out of season.
2. There is no relationship between coach authoritarianism and leadership style, coach age, head coaching experience, playing ability and coach effectiveness measures.
3. There is no relationship between coach motivational style and coach training, coach experience, coach-player relations, time spent on coaching in season and out of season, and the playing experience and ability of the coach.
4. There is a positive relationship between how a coach is rated by his peers and his winning percentage and number of championships won.
5. There is no relationship between the measures of coach effectiveness and coach role perception and coach tenure.

6. There is no relationship between coach authoritarianism and tenure and coach role perception.
7. There is no relationship between coach motivational style and coach role perception.

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TABLE OF CONTENTS

CHAPTER		PAGE
I	STATEMENT OF THE PROBLEM	1
	Introduction	1
	Need for the Study	2
	The Problem	4
	Limitations	6
	Delimitations	8
	Definition of Terms	8
II	REVIEW OF LITERATURE	10
	Defining Leadership	10
	Theory Development	13
	The Fiedler Contingency Model	23
	Leadership in Sports	28
	Introduction	28
	The Trait Approach	29
	Behavioral Dimensions of Leadership	36
	Interactional Approach to Leadership in Sport	43
III	METHODS AND PROCEDURES	50
	Sample	50
	Data Collection Procedure	50
	Questionnaire	50

CHAPTER PAGE

Statistical Treatment.....54

IV RESULTS AND DISCUSSION.....56

Results.....56

The Sample.....56

Hypotheses Results.....72

Discussion.....81

Coach Effectiveness Correlates...81

Coach Authoritarianism Correlates84

Supplemental Findings.....86

V SUMMARY AND CONCLUSIONS.....93

Summary.....93

Conclusions.....95

Implications.....96

Recommendations.....101

BIBLIOGRAPHY.....103

APPENDIX A: Correspondence.....114

APPENDIX B: Questionnaire.....118

LIST OF TABLES

Table	Description	Page
I	Pearson Product Moment Correlation Coefficients Between Measures of Coach Effectiveness and Related Inventory Items.	77

LIST OF FIGURES

Figure		Page
1.	Classificiation of Leadership Theories	14

CHAPTER I

STATEMENT OF THE PROBLEM

INTRODUCTION

Coaching, as it occurs in educational institutions is still in its infancy as a profession in Canadian society. To begin with, coaching is often looked upon as a voluntary position and is treated as such, for example; there is little or no monetary reward, no workload reduction from other formal duties and often meagre recognition from academic administrators. In addition to these constraints, academic institutions often operate their athletic programs in an ambivalent manner; on one hand, they give vocal support to athletics as a vital and integral part of the educational process, while on the other hand, athletics is often treated as a 'frill' and is one of the first programs to be curtailed during cut-backs.

One look at a newspaper will give the observer an indication of the importance placed on athletics by the public. Daily, one can find five or more pages devoted to sports coverage encompassing local, national and international levels. There is obviously considerable public interest in what is happening in the sports arenas of the world.

The pivotal person in the athletic setting is the coach. North American society demands winning teams and the coach is looked to as being responsible for producing

this effect. He will probably not remain very long in his role as a coach if his teams do not win. This generalization is probably not as applicable in Canada as it is in the United States, particularly in the academic setting, but it is still fairly common for coaches to step down or be replaced if their teams fail to win.

Because of the nature of the position, the terms coach and leader are synonymous. His leadership consists of a 'vested' power, in that usually the team does not choose him, but he is appointed, or hired by an athletic director or principal to 'lead' the team.

Gowan sums up desirable behavioral qualities of a coach in the following statement:

> The coach is the catalyst in the process of improving performance and in assisting the athlete to find satisfaction, enjoyment and fulfillment in the total endeavour (1975:15).

Obviously, if we can determine why some coaches are more effective than others, it will improve our understanding of sports in general and of the coaching situation in particular. It will also help us train coaches to be more efficient and successful, thus maximizing the potential of the athlete.

NEED FOR THE STUDY

Schafer (1966) has stated four special advantages for the study of sport groups:

> First, the sports group is a 'natural' rather than an artificial or a laboratory group.....
> Second, research focused on a particular sport controls a number of confounding variables by automatically holding them constant. Examples of such variables include group size, role structure, and rules of conduct. Third, becuase sport groups are typically in pursuit of zero-sum goals, they often provide an ideal context for the study of cooperation and competition and intergroup and intra-group conflict. Finally, sport groups with an emphasis on winning typically offer objective measures of group effectiveness in terms of the number of errors made, points scored for or against the percentage of games won; that is they offer ideal settings.....for the study of the effects of such variables as membership composition, cohesion, informal norms, leadership and social environment on the attainment of group goals (Loy et al., 1978:68-69).

Naylor (1976) recommends that "leadership effectiveness involving different sport coaches should be studied so that comparisons and generalizations can be attempted". Naylor also suggests that "an investigation of coaching leadership in other Canadian provinces be conducted to determine societal or situational factors". Although Naylor's study concerns football coaching effectiveness, his recommendations are of importance to the present study. Thus a study of the effectiveness of University basketball coaches, might be beneficial to our understanding of what makes successful coaches.

Fiedler's contingency theory, which is the most prominent theory in the area of leadership, had its origin in his studies of basketball teams (Fiedler, 1954) but,

very few researchers have attempted to test the model in the athletic context.

There is generally a lack of normative data regarding coaching effectiveness at any level, and particularly at the Canadian University level. Of the studies produced on the subject of coaching effectiveness in Canada, most have been done on high school coaches, (Naylor, 1976; Danielson, 1974). Thus a greater understanding of coaching effectiveness at the University level will permit a more generalized familiarity with the coaching scene in Canada. At the high school level coaches are usually employed as teachers first, coaches second. What is the situation at the University level? What should it be?

From a procedural point of view it is necessary to substantiate current theories regarding leadership. Since much of the research has been conducted in industrial or managerial settings it is of value to determine whether or not these theories are cross-situational.

This study will examine Canadian Interuniversity Athletic Union male basketball coaches with the purpose of understanding relationships between success (measured by percentage of wins in league play) and various leadership measures.

THE PROBLEM

The object of this study was to examine the relationship between leadership characteristics of the

head coach and team performance of Canadian Interuniversity Athletic Union basketball teams. Of particular interest were the various measures of leadership effectiveness provided by Fiedler's Contingency Model (1967). It was anticipated that various relationships would appear which could lend themselves to the prediction of team success based on the coach's style of leadership.

The following are the relationships of importance in this study:

1. Is there a relationship between the measures of coach effectiveness and leadership style, degree of authoritarianism, coach-player relations, coach role perception and time spent on coaching in season and out of season.
2. Is there a relationship between coach authoritarianism and leadership style, coach age, years of head coaching experience, playing experience and tenure?
3. Is there a relationship between coach motivational style and coach training, coach experience, coach-player relations, coach role perception, time spent on coaching in and out of season and playing experience of the coach.
4. Is there any relationship between peer rating of coaching effectiveness and

various measures of coach effectiveness as defined by this study?

5. Is there a relationship between playing position and recruitment to head coaching position?

LIMITATIONS

1. A major limitation of this study is that of sample size which is due to the fact that the total population of C.I.A.U. male basketball coaches was only thirty-nine.
2. The fact that conference rules regarding eligibility and recruiting are different throughout the country could have affected the data. Certain conferences have stricter rules governing recruiting and eligibility eg. the Canada West Universities Athletic Association restricts recruiting to within one's own province, whereas the Atlantic Conference allows wholesale recruiting. This obviously restricts the number of recruiting opportunities in the Western Conference compared to the Atlantic Conference. Brent Rushall states: "It would appear that the most significant factor for making a coach successful is the athletes in the group" (1975:79). Therefore, if Rushall is right, coaches

who can recruit better players will be more successful. If the rules were consistent throughout Canada then equal opportunities would be available for all.

3. Two instruments used in this study, the Coach Improvement Scale and the Coach Effectiveness Rating Scale have been tested only on one other occasion.
4. Information on all effectiveness measures is provided by the coach himself, a factor which could lend itself to a systematic bias of reported scores.
5. The fact that coaches answered the questionnaires near the end of the season, and may have been involved in playoffs, could have limited the time which they were willing to devote to the inventory.
6. There may have been a possibility for coaches to evaluate in the middle of the scale to avoid extreme positions, thus, creating error of central tendency (Anastasi, 1976).
7. The Least Preferred Co-worker Scale was modified to include only seven response blanks instead of eight. It was decided that, since for this study only a measure of coach orientation was necessary, the LPC

scale would be scored on the basis of 1-7 per item rather than 1-8.

8. The complexity of the phenomenon of leadership in the different fields of business, industry and social work make it difficult to build a conceptual framework (Gibb, 1969; Stogdill, 1974; Hanson, 1973).

DELIMITATIONS

1. The number of subjects was delimited to twenty-nine by the proviso that coaches must have two or more years head coaching experience. It was felt that a first year coach could have success by taking over a pat team from the retiring coach or that failure could result from insufficient time to establish his ideas and approaches.

DEFINITION OF TERMS

Coach: The head coach, the individual who has the final authority in regard to team operation and decisions.

Coach effectiveness: Measured in terms of his team's performance or, percentage of games won in league competitions, and any championships that lead directly to the National championship, including all years coaching.

Coach experience: Refers to all coaching experience other than that of University head coach.

Head Coach experience: Refers to all years as head coach at the University level.

Coach motivational style: As defined by Fiedler (1967), refers to an underlying need structure which motivates his behavior in the role as a head coach, as measured by his score on the Least Preferred Co-worker Scale (LPC).

Coach-team relations: The degree to which the coach feels accepted by the team and is relaxed and at ease in his role. Measured by the Group Atmosphere Scale (GA) as defined by Fiedler (1967).

Coach training: Refers to any developmental experience undergone by the coach which could reasonably be expected to improve coaching performance.

Playing background: Number of years experience playing at University or post-University level, coupled with formal recognition in the form of awards, allstars, captain and so forth.

Tenure: Whether the coach has tenure at the University. This refers to the job security of the coach. Does he have security or not?

CHAPTER II

REVIEW OF LITERATURE

DEFINING LEADERSHIP

One of the most serious problems with trying to come to grips with leadership or leadership effectiveness is to find an adequate definition of leadership. No-one seems to know for sure what it really is.

French critic Henri Peyre says:

> Leadership can be but a broad ideal proposed by the culture of a country, instilled into the young through schools, but also through the family, the intellectual atmosphere, the literature, the history, the ethical teaching of that country. Will power, sensitivity to the age, clear thinking, the ability to experience the emotions of a group and to voice their aspirations joined with control over these emotions in oneself, a sense of the dramatic..... are among the ingredients of the power to lead men (Time, 1974:21).

Harry Truman spoke of leadership as "the ability to get men to do what they don't want to do and like it" (Time, 1974:28).

According to Fiedler and Chemers (1974) the leader, in layman's language, is someone who is a little larger than life, one who draws people to him like a magnet by "charisma". He is a person others want to follow, one who commands their trust and respect, as well as their loyalty. This is the picture of the emergent leader, the "Great Man" who captures the imagination as well as the admiration of those with whom he deals.

Hollander and Julian (1969) suggest an appropriate

synonym and/or definition for leadership is the term influence. An implication inherent in this view according to Chelladurai and Carron (1978) is that in leader-subordinate interactions there is reciprocal influence: the leader exerts influence on the subordinate (or group) and the subordinate (or group), in turn, influences the leader. A second implication of course, is that leadership, the exerting influence, may be inferred either through the behavior of leaders or the resultant behavior of their subordinates.

Stogdill (1974) suggests eleven perspectives from which leadership may be viewed:

1. A function of group process.
2. Personality or effects of personality.
3. The art of inducing compliance.
4. The exercise of influence.
5. A form of persuasion.
6. A set of acts or behaviors.
7. Power relationship.
8. An instrument of goal achievement.
9. An effect of interaction.
10. A differentiated role.
11. The initiation of structure.

Any or all of the meanings noted by Stogdill might apply to a particular circumstance, but no single definition is universally applicable. However, leadership is clearly a role that leads toward goal achievement,

involves interaction and influence, and usually results in some form of changed structure or behavior of groups, organizations, or communities. Strength of personality and ability to induce compliance or to persuade are critical variables in the effectiveness of leaders. Stuart Marshall (1970) has listed five criteria for leadership (Berg, 1977:212-214):

1. The concept that leaders are born not made is not a valid one and should be discarded.
2. The social and psychological needs of the leader and of the group are powerful forces in the behavior of both.
3. Communication skills are essential in leadership.
4. The accomplishment of objectives requires two kinds of behavior - getting the job done and building and maintaining the group.
5. The quality of leadership is measured by the appropriateness of behavior of the leader in whatever situation he finds himself.

The quality of leadership, more than any other single factor, determines the success or failure of an organization (Fiedler et al., 1976). Leadership can only be exercised in groups where people want to accomplish

a common goal. The effectiveness of the leader depends, therefore, not only on him, but also on those he leads, and the conditions under which he must operate.

Leadership has different meanings to different people. It includes the ability to counsel, to manage conflict, to inspire loyalty and to imbue subordinates with the desire to remain on the job. It also means the effective accomplishment of the primary task; the performance of a job for which the work unit or organization has been established.

To adequately define leadership is difficult; but when all is said and done, it must finally be recognized that the ultimate test of leadership is one's ability to motivate others to follow his or her ideas. Zorn (1978:29) says:

> I have observed one thing about leadership for certain, and that is it usually begins with a vision of success, a glimmer of intuition or insight that solutions are possible.

THEORY DEVELOPMENT

Historically, in the study of leadership, the principal focus has evolved, first from an emphasis on the examination of the traits of leaders (with particular reference to the characteristics possessed by successful leaders) to secondly, the examination of the actual behaviors of leaders and then, finally to an analysis of the situational characteristics influencing leadership with specific reference to the interactive effects of

those situations with the traits and behaviors of the leaders.

	Traits	Behaviors
Universal	Early "Great Man" Theory	Ohio State & Michigan Studies
Situational	Contingency Model of Leadership. (Fiedler, 1967)	Path-Goal Theory (House 1971) Role-Making Model (Gisen and Cashman, 1975) Situational Theory (heresey and Blanshard, 1968 and 1977) Adaptive-Reactive Theory (Osborne and Hunt, 1975) Normative Model of Decision-Making (Vroom and Yetton, 1973)

FIGURE I: A Classification of Leadership Theories. Adapted from Behling and Schriecheim, 1976.

Behling and Schriescheim (1976) have classified various leadership theories into four categories according to whether the basic unit of reference has been traits or the behaviors of the leader and whether these were viewed as being universal or situational in nature. A schematic illustration of this classification is shown in Figure I above.

Much research on leadership has focused on the influence of the leader on his group: less emphasis has been placed on the variables that cause a leader to engage in various activities. There is evidence that leader behavior is influenced by environmental

contingencies and that the leadership process is not undirectional in nature (Barrow, 1976).

The behavior of the individual being led has been postulated to be a determinant of the leader's behavior (Hemphill, 1949). In a study by Haythorn, Couch, Haefner, Tangham and Carter (1956) it was found that a leader working with highly authoritarian group members tended to behave in an authoritarian manner regardless of his own personality characteristics, while the leader of low authoritarian group tended to behave more in a democratic manner. The evidence that subordinate behavior does influence leader behavior styles is inconsistent. There is considerable literature which indicates that leaders do exhibit behavioral flexibility. Fiedler and Chemers (1974) postulate that leaders adjust their behaviors as the favorableness of the situation changes: Heller, 1971; Rubin and Goldman, 1968; Tannenbaum and Schmidt, 1958 found that leadership style varies with environment.

Barrow (1976) found that subordinate performance was a strong causal force in the determination of the behavior a leader utilized. Low performance by subordinates caused the leader to act more punitively, more autocratically, less considerate and to push for more production; whereas high subordinate performance resulted in leader behavior being more considerate, less punitive,

less autocratic and somewhat less task-oriented. High complexity task caused the leader to utilize more task-oriented behavior regardless of the performance of the workers. It appears that the leader does react to environmental variations and changes his behavior in response. The use of different leadership behavior may be contingent upon environmental factors.

The proposition that subordinate performance influences the behaviors a leader uses raises the interesting possibility that the nature of effective leadership resides in the leader's subordinates. It may be that congruency between a leader's and subordinate's expectations and behavior determines effective leadership.

Korten (1962) formulated a model that proposes that under circumstances of group stress a group will seek or become receptive to an authoritarian style of leadership. An absence of group stress, conversely is thought to facilitate the emergence of a democratic style.

Fodor (1976) found that supervisors subjected to group stress revealed in their leadership behavior, a greater tendency toward authoritarian modes of control than did supervisors exposed to the neutral condition.

Style of leadership most effective in a group stress situation was found by Fiedler and Baron (cited Fiedler, 1967) to be facilitated by a low LPC or task-oriented leader. Rosenbaum and Rosenbaum (1971) likewise observed that a group subjected to a high stress manipulation

(which emphasized the competitive nature of the group task) performed best under authoritarian style of leadership, whereas a group in which competitive pressure was minimal fared best in response to democratic leadership.

A study by Cravens and Worchel (1977) deals with the reactions of followers to the exercise of reward and coercive power. The use of coercive power involves the threat of punishment and/or actual punishment for failure to conform to the leader's demands, whereas the use of reward power involves the offering of some valuable object or activity for conformance to the leader's demands (French and Raven, 1959). In the use of coercive power, an undesirable consequence is suffered if the group member fails to fulfill the leader's demands, whereas nothing other than avoidance of an aversive consequence is gained for conformity. With the use of reward power, a desirable consequence is gained if the group member fulfills the leader's demands, whereas nothing other than the omission of a desirable consequence is suffered for failure to conform. The Craven and Worchel study also took into account the locus of control of the individuals involved. An individual with an internal locus of control believes that the reinforcements they receive are contingent upon their own behavior, whereas individuals with an external locus of control believe that reinforcements they receive are a matter of luck or chance. Several lines of research suggest that externals are more susceptible

to leaders attempts to control behavior and more susceptible to attitude change under persuasion attempts from a high prestige source than from a low prestige source (Ritchie and Phares, 1969). Consistent with the data, it might be further suggested that the type of leadership might differentially influence internals and externals. Externals might be amenable to strong attempts to control behavior, such as would be the case with the use of coercive power, whereas internals would likely resist such attempts. Results of their study indicated that internals less frequently complied with the leader's demands than externals regardless of power used, and complied least frequently under coercive power when feed-back was given.

Along with other neglected aspects of process in the study of leadership is the goal-setting activity of the leader. Its importance appears considerable, though few studies give it attention. In one of these, involving discussion groups, Burke (1966) found that the leader's failure to provide goal orientations within the group led to antagonism, tension and absenteeism. This effect was most acute when there was clear agreement within the group regarding who was to act as the leader.

In social exchange terms, the person in the role of leader who fulfills expectations and achieves group goals provides rewards for others which are reciprocated in the form of status, esteem, and heightened influence.

Because leadership embodies a two-way influence relationship, recipients of influence assertions may respond by asserting influence in return, that is, by making demands on the leader. The very sustenance of the relationship depends upon some yielding to influence on both sides. As Homans (1961) put it, "Influence over others is purchased at a price of allowing one's self to be influenced by others" (p. 286).

The elicitation of leader behavior is now a demonstrable phenomenon in various experimental settings. In one definitive study conducted by Pepinsky, Hemphill and Shevitz (1958) subjects who were low on leader activity were led to behave far more actively in that role by the group's evident support for their assertions. Alternatively, other subjects known to be high on leader activity earlier were affected in precisely the opposite way by the group's evident disagreement with their statements.

In a similar vein, Rudraswamy (1964) conducted a study in which some subjects within a group were led to believe they had higher status. Not only did they attempt significantly more leadership acts than others in their group, but they even outdistanced those subjects who were given more relevant information about the task itself.

The "idiosyncrasy credit" concept (Hollander, 1958) suggests that a person's potential to be influential arises out of positive dispositions others hold toward

him. In simplest terms, competence in helping the group achieve its goals, and early conformity to its normative expectations for members provide the potential for acting as a leader and being perceived as such.

One prevailing expectation which does yield consistent findings across situations, is that the leader's competence in a major group activity should be high. Dubno (1965) reported that groups are more satisfied when leaders are demonstrably competent in a central function and do most of the work associated with that function. In general, the greater influence of a leader perceived to be more competent was verified experimentally by Dittes and Kelley (1956) and by Hollander (1960), among others.

Another leader attribute which evidently determines the responsiveness of followers is his perceived motivation regarding the group and its task (Rosen, Levinger and Lippitt, 1961). Julian and Hollander (1966) found that, aside from the significance of task competence, the leader's "interest in group members" and "interest in group activity" were significantly related to group members' willingness to have a leader continue in that position.

According to Hollander and Julian (1971), the one overiding impression conveyed by surveying the literature of the 1960's, in contrast to the proceeding two decades, is the redirection of interest in leadership toward

processes such as power and authority relationships. The tendency now is to attach for greater significance to the inter-relationship between the leader, the followers and the situation. In consequence, the problem of studying leadership and understanding these relationships is recognized as a more formidable one than was earlier supposed. Several of the particulars which signal this changing emphasis may be summarized under four points, as follows (Hollander and Julian, 1971:515):

1. An early element of confusion in the study of <u>leadership</u> was the failure to distinguish it as a process from the <u>leader</u> as a person who occupies a central role in that process. Leadership constitutes an influence relationship between two, or usually more, persons who depend upon one another for the attainment of certain mutual goals within a group situation. This situation not only involves the task, but also comprises the group's size, structure, resources, and history, among other variables.
2. This relationship between leader and led is built <u>over time</u> and involes an exchange or transaction between leaders

and followers in which the leader both gives something and gets something. The leader provides a resource in terms of adequate role behavior directed toward the groups' goal attainment, and in return receives greater influence associated with status, recognition and esteem. These contribute to his "legitimacy" in making influence assertions, and in having them accepted.

3. There are differential tasks or functions attached to being a leader. While the image of the leader frequently follows Hemphill's (1961) view of one who "initiates structure", the leader is expected to function as a mediator within the group, as a spokesman outside it, and very often also as the decision maker who sets goals and priorities. Personality characteristics which may fit a person to become a leader are determined by the perceptions held by followers, in the sense of the particular role expectancies and satisfactions, rather than by the traits measured via personality scale scores.
4. Despite the persisting view that leadership traits do not generalize

> across situations, leader effectiveness can and should be studied as it bears on the group's achievement of desired outputs (Katz and Kahn, 1966). An approach to the study of leader effectiveness as a feature of the group's success, in system terms, offers a clear alternative to the older concern with what the leader did do or did not do.

THE FIEDLER CONTINGENCY MODEL

Increasingly, behavioral scientists are inclined toward a contingency analysis as a useful means for investigating organizational systems. The contingency model is based on the premise that there is no single design and no single principle that is best for all situations. It postulates that group or organizational effectiveness depends on a unique blend of leadership style, type of task, organizational structure and groupings of people. In other words, contingency analysis discounts the universalist notion of finding one 'best' way of organizing and attempting to identify the best 'fit' in a particular set of circumstances.

Fiedler's (1967) theory of leadership, called the Contingency Model, has been developed over the past 25 years. This theory is, essentially, that the effectiveness of a group or organization depends on two interacting or 'contingent' factors. The first is the personality

of the leader which determines leadership style. The second factor is the amount of control and influence which the situation provides leaders over their group's behavior, the task and the outcome. This factor is called 'situational control' or 'situational favorableness'.

Fiedler (1967) developed the Least Preferred Co-worker Scale (LPC) to indicate the personality orientation of the leader. On the LPC scale a score of 57 or less indicates low LPC and thus the leader is considered a task-oriented person. Fiedler is saying that the person who describes his least preferred co-worker in very negative, rejecting terms essentially says work is extremely important to me, therefore, if you are a poor co-worker and prevent me in my efforts to get the job done, then I cannot accept you in any other respects either. Therefore, he describes his LPC as unfriendly, uncooperative, hostile, etc. This is a strong emotional reaction to people with whom the leader cannot work, who frustrate him in getting the job done. This type of leader is, therefore, described as task-oriented.

On the other hand, the high LPC leader (score of 64 or above) basically says, even if I can't work with you, you may still be relatively pleasant, industrious or sincere. In other words, the relationship with others is important enough compared to the task, that the individual can clearly differentiate between his

negative reactions to someone who is a poor co-worker and his appreciation of him as an individual. This leader is called a relationship-oriented person.

There is also a middle LPC group consisting of perhaps 15-20% of the population, clustered around the population mean, which appears to differ in many respects from either the high or the low LPC. These individuals tend to be socially independent, less concerned about the way others evaluate them, and less eager to conform to the expectations of others or to take the leadership role (Fiedler, Chemers, and Mahar, 1976; Mai-Dalton, 1975). Some individuals in this middle category may also have mixed motivation or a combination of the two motivational patterns. We currently know relatively little about this group, which has been tentatively labelled "socioindependent".

Fiedler et al. (1976) lists three major components which primarily determine control and influence in the situation:

1. Leader-Member relations (measured on the Leader-Member Relations Scale) - refers to the degree to which the group supports the leader. A score on the LMRS of 25 or above indicates a good relationship, 20-25 is moderate and below 20 is a poor relationship.
2. Task Structure (measured on the Task Structure Rating Scale Part I and II) -

refers to the degree to which the task clearly spells out goals and procedures and specific guidelines. The Task Structure Rating Scale Part II is subtracted from Part I to get the total Task Structure Score. A score of 6 or below is low in structure, 7-13 medium and 14 and above is high.

3. Position Power (measured by the Position Power Rating Scale) - refers to the degree to which the position gives the leader authority to reward and punish subordinates. A score of 7-10 is high in position power, 4-6 medium and 3 or below is low.

Fiedler's Situational Control Scale then brings together the three components to indicate the amount of control present in the situation:

A. High Control (51-70) indicates that the leader has a great deal of control and influence, exemplified by good leader-member relations, a structured task and high position power.

B. Moderate Control (31-50) indicates that the leader is presented with mixed problems; either good relations with subordinates, but unstructured task and low position power, or the reverse, poor relations, but a structured task and high position

power.

C. Low Control (10-30) indicates leader's control and influence are relatively low. That is, the group does not support the leader, and neither the task nor position power give the leader much influence.

Fiedler summarizes his model by stating that:

> The basic problem in leadership performance is the appropriate match between leader's style or motivational pattern and the degree to which the leadership situation provides the leader with control and influence. Task-motivated leaders tend to perform best in high control and low control situations, and relationship-motivated leaders perform best in moderate control situations. The problem for leaders consists in getting into and remaining in, situations in which they can perform well. Knowing your leadership style and being able to identify the amount of control of the situation enables you to do this (1976:151).

LEADERSHIP IN SPORTS

INTRODUCTION

Better understanding of effective leadership and leader behavior has been a problematic undertaking by a number of disciplines. Leadership can be seen, observed, studied, and to some extent, measured. The complexity of defining and measuring leadership and leader behavior effectiveness stands out as the major stumbling block with regard to research in this area. Statistical, personal, and interactional factors have all been suggested as important elements in making up the complex mixes which emerge as effective processes and behaviors in the setting and reaching of group goals (Ryckman and Daniel, 1978).

Leadership in various segments of the population (students, military, personnel and businessmen) has been heavily researched, while others (politicians, labor leaders and criminal leaders) have been relatively neglected (Stogdill, 1974). It is possible to see from the above statement that sports leadership research has not been an overworked area.

Few in our society are in more obvious positions of leadership than athletic coaches. With the possible exception of the political leader, the athletic coach may be the most visible leader of the twentieth century. The public's love affair with sports, fed by the mass media, has projected the athlete and coach into

the spotlight of North American society. Millions of people in the U.S. and Canada know who Woody Hayes, 'Bear' Bryant and John Wooden are, but how many know who are the presidents of Ohio State University, University of Alabama and U.C.L.A.? The visibility of these coaches make it possible and probable that their effectiveness as leaders will be assessed by millions in layman's emotional terms. These assessments are made subjectively, based on the objective criterion of win versus loss. Little attention is paid to the many variables involved in making a team successful, one of which is obviously the leader. This is the terrain of the researcher. He must try to analyze objectively and scientifically the various criterion which will produce success for the leader and his followers, whether it be in industry, business or athletics.

For most athletic teams, coaches are appointed leaders, and as such they are held responsible for the performance of the team. The coach is the authority figure. While it is not really known to what extent the success or failure of a team is due to the leadership competence of the coach, there is little doubt that it is an important factor.

THE TRAIT APPROACH

As with leadership theories, the early studies of athletes and coaches emphasized the trait approach. One

of the earliest investigations of the personality structure of coaches examined the personality profiles of 64 coaches in four major sports; baseball, basketball, football and track (Ogilvie and Tutko, 1966). They reported that as a group, coaches represent highly success-driven, dominant, organized, conscientious, emotionally stable, and persevering individuals. In addition, the coaches were found to be sociable, trusting, willing to accept blame and responsibility and "... very high in leadership qualities when compared with norms based on men who were selected or elected leaders" (Ogilvie and Tutko, 1966). Similar traits have been reported by Andrud (1970), Gagen (1971) and Hendry (1968).

Hendry (1968) assessed the personality traits of 56 British amateur swimming coaches, using the Cattell 16 PF inventory. He reported that his group of coaches were bright, driving, aggressive individuals, but also anxious and insecure, especially the older coaches (over 40 years of age). In a subsequent study, also with British coaches Hendry (1969) found no significant personality differences between 30 "highly successful" swimming 'coaches' and 26 other swimming coaches. In a more recent study again with British subjects, Hendry (1972) indicated that coaches were authoritarian types who apparently enjoy being the center of attention, he also suggested that they were aggressive.

On the other hand Ogilvie and Tutko found that

coaches were characterized by two traits that might detrimentally influence their exertion of leadership in sport situations. Firstly, they expressed a low interest in the dependency needs of others, and thus might not provide much emotional support to others. Secondly, they expressed a marked degree of psychological inflexibility and extreme conservatism, and thus might be expected ".....to limit their use of new information or different thinking in terms of dealing with new problems" (Ogilvie and Tutko, 1966:24).

In recent years, coaches have come under a barrage of criticism for their leadership practices (Scott, 1969 and 1971, Ogilvie and Tutko, 1971). Tutko and Richards (1971) suggest that as leaders, most coaches believe in strong discipline, rigidity of rules, extrinsic motivation, and an impersonal attitude towards their athletes, and they characterize most coaches as being hard-nosed and authoritarian. Sage (1973) noted that this leadership strategy bears a strong resemblence to that employed by the Scientific Management movement which emerged from the studies and writings of Frederick W. Taylor (1911). Thus, many coaches have tended to view team members as objects in a machine-like environment where emphasis is on instrumental rather than consummatory behaviors. The players become another man's (coach's) instrument, and they are used to reach the objectives and goals of the organizational collectivity; they are reduced to cogs in

the organization's machinery.

Jack Scott (1969, 1971), whose opinions are not necessarily empirically based, has criticized American coaches and has characterized the personality of coaches in the following way:

> The typical.....coach is a soulless, back slapping, meticulously groomed, team oriented efficiency expert - a jock's Robert MacNamara .....Most coaches have as much concern for the welfare of their athletes as a general has for the soldiers he sends into battle.....For most college coaches, the athlete is significant only to the extent that he can contribute to a team victory.....For every relaxed, understanding coach.....there are one hundred rigid, authoritarian coaches who have so much .....character armor that they rattle (1969:7).

In contrast, four relatively comprehensive investigations of the personality structure of coaches indicate that the stereotype of the athletic coach as a conservative, dogmatic, and manipulative individual is not supported. First, Longmuir (1972) administered Rokeach's (1960) Dogmatism Scale to samples of high school basketball and football coaches, and discovered that coaches do not differ significantly in their degree of dogmatism from members of a wide variety of occupational groups that were assessed by Rokeach et. al.

Second, Sage (1972a) obtained measures of Machiavellianism for randomly selected national samples of collegiate football, basketball, and track coaches, as well as randomly selected high school basketball and football coaches in the state of Colorado.

> Machiavellianism is associated with emotional detachment in interpersonal relations, a tendency to exploit situations and others for self-gain, and a tendency to take over control in small groups (Geis, 1968:407).

Sage found no differences in Machiavellianism between the athletic coaches and the male college students, no differences among coaches with winning records (over 60%) and coaches with won-lost records under 60%. It should be noted that experimental evidence indicates that high Machs are markedly less likely to become emotionally involved with other people, they are cold, amoral, possess a detached unresponsiveness and a covertly aggressive willingness and ability to manipulate others (as cited in Ball and Loy, 1975:415).

Third, Walsh and Carron (1977) compared the degree of Machiavellianism among three groups of Canadian coaches (high school physical education coaches, non-physical education coaches, community volunteer coaches) and a control group of non-coaching teachers. On the basis of Mach scale scores, they reported that community volunteer coaches were significantly lower in Machiavellianism than either the non-physical education coaches or the non-coaching teachers. Other intergroup comparison revealed no significant differences.

Finally, Sage (1972b) in a second study, assessed the value orientations (liberalism versus conservatism) of randomly selected national samples of collegiate

basketball, football and track coaches using the Polyphasic Values Inventory (PVI) developed by Roscoe (1965). In comparing his findings for the coaches with those reported for businessmen (Elliott, 1969), Sage states that all coaches considered as a group demonstrated more liberal tendencies in such domains as the treatment of communists, international relations, education methodology, academic freedom and racial and sexual relations. However, they were more conservative than businessmen on such issues as labour unions and the use of alcoholic beverages.

As well, Synder (1975) found that seventy percent of their coaches gave athletes advice about personal problems in a study done investigating basketball coaches and two varsity team members in each of 270 Ohio high schools.

Bain (1973) concluded, on the basis of significant evidence, that coaches of football and basketball in the secondary school systems of Edmonton, Alberta, Canada, are not highly authoritarian in specific measures of general and right-wing authoritarianism.

Four studies have examined the relationship between personality orientation and team success. Penman et. al. (1974), using Rokeach Dogmatism Scale to measure degree of authoritarianism, examined the relationship between team success and authoritarianism of selected samples of head high school basketball and football

coaches. They found ".....that the more successful coaches were more authoritarian than the less successful coaches" (Penman et. al., 1974:156).

Sage (1972a) however, on the basis of scores on the Mach scale, found no significant differences in Machiavellianism between coaches with won-loss records over 60% and those with won-lost records under 60%. Moreover, he found that college basketball coaches with won-lost records over 60% had significantly lower Mach scores than those with won-lost records under 60%. Similarly, Walsh and Carron (1977), in their study of three groups of Canadian coaches, discovered no significant differences between degree of Machiavellianism and won-lost records.

Cooper and Payne (1972) examined the relationship between personality and performance by administering the Bass Orientation Inventory (Bass, 1960 and 1962) to the staff and players of 17 soccer teams in the senior division of the English Football League. This inventory provides scores on three general types of personality characteristics: self-orientation, interaction orientation and task orientation. Cooper and Payne obtained a significant correlation ($r = .72$) between the task orientations of coaches and trainers and team success, but found no significant correlations between the task orientations of managers and captains and team success. With respect to managers, they suggest that, since

managers are concerned mainly with administration and have little contact with the players, task orientations are not as relevant for them as for coaches and trainers. With respect to team captains they suggest that since ".....they are not appreciably more task oriented than players, their task behavior is presumably not sufficiently different to have much influence on the players' performances" (as cited in Loy et. al., 1978:75).

In summary of the trait approach to coaching leadership, there is some evidence (noted earlier) that coaches have a relatively consistent set of personality characteristics. Sage (1975b) suggests that the beliefs and behaviors of coaches may result from selected child-rearing practices, parental values, sport participation patterns and the process of occupational socialization. Limited evidence suggests that the personality orientations of coaches, however acquired, influence coach-player relationships and group performance.

BEHAVIORAL DIMENSIONS OF LEADERSHIP

Leaders display the same behaviors as other group members, but their patterns of behavior are typically more frequent and dominant. Moreover it is suggested that:

> if a leader is to successfully exert influence and move a group toward its goals, he must motivate the members and maintain harmony and satisfaction, while at the same time directing and co-ordinating the efforts of the group (Krech et al., 1962:433).

Loy et al. (1978) notes two leadership types;

instrumental and expressive. A primary reason for the emergency of the two types is that there are conflicting expectations associated with a leader in his or her leadership role. For example, it is difficult for leaders to be friendly with their followers (expressive) and simultaneously make impersonal and difficult decisions (instrumental) that may be contrary to the wants and wishes of the majority of group members. Moreover, in some complex task groups, two or more official leaders will be respectively assigned responsibilities related to one of the two functions. For example, it is currently common practice within intercollegiate basketball teams in the United States for the head coach to be responsible for directing and coordinating the task efforts of the team, and for the assistant coach to be responsible for maintaining harmony and morale among team members (Loy et al., 1978:77).

Several studies have been done on leadership behavior and success. Swartz (1973) compared 72 college coaches classified as successful (won-lost record over 50%) or unsuccessful (won-lost record under 50%), in order to assess the relationship between type of coaching leadership (i.e. laissez-faire, democratic-cooperative, autocratic-submissive, autocratic-aggressive) and success. He found no differences between leadership behavior patterns of successful and unsuccessful coaches.

Lenk (1977), comparing 'authoritarian' and

'democratic' styles of leadership, points out that rowing crews coached in both styles have won international championships and thus neither style has proven to be more effective than the other. Singer (1975) notes:

> Coaches attempting to formulate effective policies and fans trying to gain insight into what makes teams tick, must have left their television sets completely confused during the week prior to the 1974 professional football Super Bowl championship between the Miami Dolphins and Minnesota Vikings. Vince Lombardi, the late legendary coach of the Green Bay Packers and Don Shula, coach of the Miami team, were contrasted in styles of leadership in a specially prepared film that isolated parts of their speeches and views on coaching. Since both are acknowledged as having developed fairly invincible teams in their times, it was of great interest to view them on film and listen to their comments. Fiery Lombardi spoke of individual and team discipline, on and off the field, as the key to winning. He was known as a man who commanded the respect of his players; one who dictated life styles and regulations. Shula, on the other hand is soft-spoken and relatively reserved. It is said that in the Miami practice camp there is no attempt to emotionally arouse the players. Shula believes that the athletes are mature enough to guide their own personal lives and to psychologically prepare for the contests. All Miami does is win consistently! How can we explain two winning teams, both extremely well-coached, with coaches who in personality and belief represent differences to an extreme? Outstanding coaches of various athletic teams can be found to represent the various modes of behavior. There is no one stereotype of the successful coach (p. 25-26).

Tharp and Gallimore (1976) observed John Wooden's behavioral acts during practices in his last season as head coach of basketball at U.C.L.A. They recorded 2,366 acts of teaching by Wooden, which they classified in terms of ten categories of leadership behavior. They found that 50.3% of Wooden's behavioral acts during practice sessions constituted instructions (that is, 'verbal statements about what to do or how to do it'). In short, the case study of Tharp and Gallimore suggests that while coaches may be 'take-charge types' of individuals, they are far from autocratic in nature, and in fact invest more of their time in communicating information.

Danielson et al. (1975) support this observation by an analysis of coaching behavior as perceived by high school hockey players. On the basis of multidimensional scaling and factor analysis of 57 frequently reported coaching behaviors, they concluded that "commonly perceived behaviors in hockey coaching are mainly of a communicative nature with surprisingly little emphasis on domination" (p. 333).

LaGrand (1970) elicited responses of collegiate athletes (N = 304) about behavioral characteristics of coaches for whom they had played in high school and college. Athletes in basketball, soccer, wrestling and tennis responded to a semantic differential scale which the investigator developed to measure fourteen behavioral characteristics of athletic coaches. LaGrand found no

significant differences between individual and team sport coaches in giving personal attention to their athletes. In a hierarchy of behavioral characteristics, he reported that "knowledge of sport" received the highest ratings by all groups, followed closely by "enthusiasm". His findings also indicated that coaches are somewhat weak in sensitivity and understanding of the individual attitudes and needs of athletes.

Mudra (1965) attempted to ascertain the leadership behaviors of collegiate football coaches through an assessment of the applications which coaches make of certain learning principles. Learning principles were conceptualized as being gestalt-field or stimulus-response (S-R) and a list of practices in the coaching of football based upon these two learning approaches was developed by the investigator. Mudra indicates that leaders who use the gestalt-field approach to learning view man as purposive and interacting with his environment, see learning as an acquisition of cognitive structures, rather than an acquisition of habits, and favour insight and problem solving to trial and error learning, whereas the S-R approach sees man as passive and the victim of his environment, views learning as the acquisition of habits rather than as a process of differentiating, generalizing and restructuring the psychological field, and favours trial and error learning explanations.

Mudra found that small college coaches, as a group, were more gestalt-field oriented and had more individual coaches with a strong gestalt leaning than the major university coaches who were more S-R oriented and had more individuals with a strong S-R leaning. Mudra speculates that the greater "win" orientation of the major-colleges led to this discrepancy. His findings thus suggest that leadership behaviors are likely to be situation-specific.

Percival (1971) studied 382 athletes and 66 coaches through all competitive levels of sport in Canada. His study dealt with the coach from the athletes viewpoint. Athletes were asked to rate their coaches with regard to personality, technique and methods, general knowledge and mechanics. In all categories coaches rated themselves significantly higher than did the athletes. The athletes also identified 27 negative behaviors exhibited by the coaches along with 15 positive behaviors. Athletes apparently like coaches who are 'with it' from the viewpoint of understanding their social philosophy, dress, music, etc. (to know how they feel as opposed to how the coach feels), but they don't want the coach to be 'with them'. They want a leader who is interested in their problems, but who doesn't try to be 'one of the boys'. This apparently "really turns them off" (Percival, 1971:325).

Scholten (1978) investigated five behavioral leadership dimensions of coaches in relation to training

behavior; autocratic behavior, democratic behavior, social support behavior and rewarding behavior. Specifically, athletes were asked to indicate how they prefer coaches to act and how they perceive their coach as acting by completing the Leadership in Sports Questionaire. In addition, the athletes completed a seven point satisfaction scale referring to the satisfaction the athletes had with the leadership provided by their coaches. The subjects were 99 female basketball players and 10 coaches affiliated with the Canadian Interuniversity Athletic Union. Results indicated that athletes observed their coaches as exhibiting less training behavior, democratic behavior, social support behavior and rewarding behavior than expected. The perceptions the athletes had concerning autocratic behavior of coaches, however, was greater than expected. Additionally the results exemplified that there were significant relationships between discrepancy scores and the satisfaction of athletes with the leadership provided by coaches. It was found that as the discrepancy scores between perceived and expected training behavior, democratic behavior, social support behavior and rewarding behavior of coaches increased, the satisfaction of the athletes decreased with the leadership provided by the coaches. Conversely, the greater the discrepancy score in autocratic behavior of coaches, the more satisfied the athletes were with the leadership of coaches

(Scholten, 1978).

The literature regarding behaviors exhibited by coaches is inconsistent. There does, however, seem to be an increasing number of research works which discount the so called "coaching stereotype".

INTERACTIONAL APPROACH TO LEADERSHIP IN SPORT

McGregor (1960) agreed with Gibb (1954) when he stated that good leadership depended more than any other single fact on the leader's concept of what his job was. He agreed that it was more fruitful to consider leadership as a relationship between the leader and the situation than as a universal pattern of characteristics possessed by certain people (Ryckman and Daniel, 1978).

To date, the most explicit theoretical interpretation of the reciprocal effects of personality and situational variables is the contingency model of leadership developed by Fiedler (1967, 1974, 1976).

Although Fiedler's model and theory of leadership have been criticized on methodological, statistical and theoretical grounds (Ashour, 1973; Butterfield, 1968; Graen et. al., 1970; Korman, 1971; Shiflett, 1973), they have been strongly supported in whole or part by numerous empirical investigations (Fiedler, 1967, 1971b, 1973; Graham, 1973; Larson and Rowland, 1973). In view of such strong empirical support and self-evident theoretical implications for the study of leadership in sport

groups, it is somewhat surprising that Fiedler's model and theory have received only limited application in the analysis of sport groups.

Fiedler (1954) made two exploratory investigations of leadership and team effectiveness using high school basketball teams. Fiedler hypothesized that the assumed similarity scores of the teams' "most preferred co-worker".....the teams in which squad members chose their friends as co-workers performed more poorly than did those in which the team members' best friend and best co-worker were not necessarily the same person" (Fiedler, 1967). Second, Fiedler hypothesized that teams "..... in which the leaders perceived the most and their least preferred co-workers in an accepting, positive manner would be most effective" (Fiedler, 1967). Results again ran counter to the prediction, thus indicating that effective basketball teams are primarily concerned with performance and task objectives, whereas ineffective teams are overly concerned with interpersonal relations and member satisfaction (Fiedler, 1967).

Two studies done in Canada using Fiedler's theory have provided very little support for the model. Danielson (1974) using limited controls on the situational favorability, found significant relationships between LPC and team effectiveness. However, his findings were contrary to Fiedler's, in that the individuals with the low LPC scores were most effective in situations of

medium favorability and vice versa.

Naylor (1976) using head coaches from fifty amateur Canadian football teams of high school age and above found no relationship between LPC score and leader effectiveness. Naylor, however, did not control for situation favorability as defined by Fiedler (1967).

Bird (1977) studied the relationship between leadership and success of women's intercollegiate volleyball teams in two different divisions. She found that, in the case of the more highly skilled and competitive, Division I players on winning teams perceived their coaches to be relationship-oriented, whereas players on losing teams perceived their coaches to be task-oriented. But, in the case of the less skilled and competitive Division II, the results were that members of the successful teams perceived their coaches as task-oriented, whereas members of unsuccessful teams perceived their coaches as relationship-oriented. This is the exact opposite of the results found with Division I athletes. Bird explains thus:

> Perhaps on less highly skilled teams, effective coaching strategy demands greater use of designated positions such as hitters or setters, whereas on more highly skilled teams such as Division I, positions are more flexible because of the type of playing strategy employed. If this is so, then the prediction which was generated from Fiedler's model for highly structured groups would indeed be applicable to less highly skilled teams, such as those in Division II. An alternative explanation may be that players on more highly skilled

> teams may be sufficiently motivated and therefore, respond more to a supportive, socio-emotional coach. In either case, the results strongly suggest that effective leadership or coaching style is somewhat related to situational factors such as player skills (Bird, 1977:31).

Another study using LPC scores and team success was that of Vander Velden (1971) on high school basketball teams. One explicit hypothesis concerning leadership style tested in his investigation was the proposition that:

> Group effectiveness is a function of the leader's task relevant attitude; more specifically, (a) the more positive the group, and (b) the more positive the informal leader's task attitude, the more effective the group (as cited in Loy et al., 1978:75).

A positive task attitude was operationally defined as a low LPC score, the coach was defined as the formal group leader, and the informal group leader was a team member socio-metrically chosen by his team-mates. Finally, two separate, but related operational measures of team effectiveness were obtained: (a) team winning percentage in conference play, and (b) the difference between the number of points scored and allowed during conference play (Vander Velden, 1971).

Vander Velden found no empirical support for the stated hypotheses. However, when controlling for selected situational factors, he did discover significant relationships between task attitude of leaders and team success. First, with regard to the three dimensions of group

situations described by Fiedler, Vander Velden assumed that task structure remained constant for all teams and that formal leaders had relatively equal position power, and thus only leader-member relations might vary significantly among teams. When controlling for the tone of leader-member relations, Vander Velden (1971) found that:

> while the task attitudes of coaches were not related to team performance in either friendly or less friendly groupings, the informal leader's task attitude was significantly related to winning percentage in the more congenial groups (as cited by Loy et al., 1978:84).

Second, when holding task ability constant Vander Velden discovered that task attitudes of leaders were significantly related to team performance. Specifically, results revealed that within high ability groups a combination of task-oriented coach and a relationship-oriented team leader contributed to success, whereas with low ability groups a combination of a relationship-oriented coach and a task-oriented team leader was most effective.

Third, in an attempt to replicate Fiedler's model-Vander Velden determined the degree of situational favorableness by combining team task ability, group satisfaction, and leadership experience in a single measure. He reports that:

> The classification of teams into three categories similar to Fiedler's model showed task-oriented informal leaders to be most effective under unfavorable conditions with formal leaders performing maintenance

> functions in the group. In favorable situations, the roles were reversed. Groups intermediate on the favorableness continuum performed best when both leaders were less directive (as cited in Loy et al., 1978:85).

Finally in discussing the limitations of his investigation, Vander Velden (1971) points out that:

> .....according to Fiedler's definition of high and low LPC persons, there were few coaches or team members with low LPC scores, ie, few task-oriented leaders (as cited in Loy et al., 1978:75).

Inciong (1974) examined 43 high school basketball teams (43 head coaches, 27 assistant coaches, 535 players). Leadership style was assessed with the LPC, one of the components of situational favorableness, leader-member relations were measured using Fiedler's (1967) Group Atmosphere Questionnaire and the teams' won-lost record was used as a measure of performance effectiveness. Inciong hypothesized, consistent with Fiedler's theory, that the LPC score would be positively correlated with effectiveness in moderately favorable situations and negatively correlated in very favorable and unfavorable situations. The correlations were in the expected direction, but insignificant, which led Inciong to conclude that in high school basketball leadership style is unrelated to team success. This is consistent with the findings of Naylor (1976) and Danielson (1974).

In an investigation of the leadership process among 30 high school gymnastic teams, Kjeldson (1976) examined

Fiedler's theory from several different points of view and found general support for the contingency model. He found that task-oriented (low LPC) coaches tended to be associated with successful teams in situations of low favorability, while relationship-oriented (high LPC) coaches tended to be associated with successful teams in situations of moderate favorability. It is to be noted that his work represents the most comprehensive study of leadership in sports groups to date (Loy et al., 1978:86).

It is evident from the above literature that the findings concerning leadership and team success in sports are inconsistent. Generally, it is accepted that leadership is an interactional process that must take into account the situational variables as well as personality characteristics of leader and follower.

Studies concerning leadership in sport are in their infancy and obviously there is much which can be done to improve our understanding of leadership in an athletic setting.

Sage (1975) states:

> There is not enough evidence at the present time to make any definite statements about the effectiveness of the leadership styles which are employed by coaches. If coaches practices follow trends in industrial management, we might expect to see leadership in sport become more player centered and more emphasis given to player input in the decision-making functions of team organization (as cited in Ball and Loy 1975:417-418).

CHAPTER III

METHODS AND PROCEDURES

SAMPLE

Twenty-five coaches of male Canadian Interuniversity Athletic Union basketball teams with at least two years experience as a University head coach, agreed to act as respondents in this study. It is to be noted that with the constraint of two years experience only twenty-nine coaches were available. Therefore, a return rate of eighty-six percent was achieved.

DATA COLLECTION PROCEDURE

A list of available coaches was obtained from the Canadian Interuniversity Athletic Union Directory for 1978 - 1979. Each coach was sent a copy of the inventory as well as a stamped, self-addressed envelope for it's return (Appendix A). A deadline was set for it's return. One week after the deadline passed 11 coaches who had not returned the questionnaire were telephoned and a subsequent questionnaire was sent to them. Of the 11, eight returned the second questionnaire, one of which arrived too late to be included in the study.

QUESTIONNAIRE

The questionnaire consisted of 169 variables classified as personal data, training data, experience data, effectiveness data, coaching style data and coach-team relations data (Appendix B). All scale items on the

questionnaire were introduced by detailed instructions.

Personal data such as age, place of birth, marital status, number of dependents and university tenure were recorded for descriptive purposes.

Training data was considered to be any experiences which were developmental for coaching purposes. The items accepted as developmental in this study were educational background, basketball playing experience, basketball assistant coaching experience, high school and college head coaching experience and coaching experiences other than those involved with basketball.

The questions of time spent on coaching basketball during the season were scored in hours per week. The off season data was converted to total number of hours per item eg. (a) basketball camps - 10 hours per day for 10 days gives a total of 100 hours.

The coach effectiveness peer rating data was obtained to measure relationship between coaches ratings of their peers with success data. It was decided to eliminate league data in this category because in several instances only four or five teams are in each league. Therefore, if a coach omitted himself he would have only three or four coaches remaining. On this basis it was felt that the data was not beneficial.

The Coach Improvement Scale developed for football by Dr. M. F. Smith, Faculty of Physical Education, University of Alberta, and used in Naylor's (1976) study on

football coaching effectiveness, was revised for basketball and was used as a measure of training data for coaches.

Coaching effectiveness data was recorded as percentage of games won in league play and the number of championship teams coached. Championship team refers only to league, zone or National Championship, not exhibition tournaments.

The Coach Self Rating Scale was used to obtain information on how coaches felt about their expertise in the various aspects of coaching.

The Coach Attitude Behavior (CAB) Scale was used "to measure the relative amount of authoritarian attitude and behavior of coaches as it pertains to athletic coaching situations" (Bain, 1973).

The Least Preferred Co-worker (LPC) Scale developed by Fiedler (1967) was used to measure coach motivational style. Specifically, the LPC scale measured whether the coach was task-oriented (low LPC) or relationship-oriented (high LPC).

The internal consistency of this model using split-half correlations (Fiedler, 1967) have yielded uniformly high coefficients ranging from .85 to .95. This means that the person who describes his least preferred co-worker negatively on some items will also describe him negatively on other items.

Validation studies have found that the theory is

highly predictive and that the relations obtained in the validation studies are almost identical to those obtained in the original studies. The contingency model is today one of our best validated leadership theories. Not only is it based on a host of empirical data from a wide variety of groups and organizations, but it is also supported by subsequent validations in different groups and organizations, though not every study yields the expected answers. This theory, like any other, is a tool, a beginning, rather than an end to our understanding of leadership effectiveness (Fielder, 1974).

The test-retest reliability of LPC measured the consistency of the score over certain periods of time and varied from .30 to .90, well within the range of the better personality scales (Fiedler and Chemers, 1974:98).

A major criterion of situation favorableness in the coaches setting is the coach-team relations. It is fairly well understood and accepted that the coaches' power position is high and the task structure (winning) is fairly straight forward. Thus coach-team relations is probably a deciding factor in coaching effectiveness. Fiedler's Group Atmosphere Scale (GA) was used to assess the coach-player relations. As in the LPC scale, the GA scale consists of a bipolar eight point scale involving ten items. The coach was asked to describe his team's atmosphere, generally over his head coaching career, on

this scale.

STATISTICAL TREATMENT

A descriptive analysis of all variables was provided through the calculation of frequency distributions, means and standard deviations.

The following hypotheses were tested using Pearson Product Moment Correlation. Probabilities were computed and significance was accepted at the .05 level of confidence.

1. There is no relationship between the measures of coach effectiveness and leadership style, degrees of authoritarianism, coach-player relations, coach experience and time spent on coaching in season and out of season.
2. There is no relationship between coach authoritarianism and leadership style, coach age, head coaching experience, playing experience, playing ability, and coach effectiveness measures.
3. There is no relationship between coach motivational style (LPC) and coach training, coach experience, coach-player relations, time spent on coaching in season and out of season, and the playing experience and ability of the coach.
4. There is no relationship between peer rating

of coaching effectiveness and various measures of coach effectiveness as defined by this study.

The following hypotheses were tested using Point Biserial Correlation, again acceptance was at the .05 level of confidence:

5. There is no relationship between the measures of coach effectiveness and coach role perception.
6. There is no relationship between coach authoritarianism and tenure and coach role perception.
7. There is no relationship between coach motivational style (LPC) and coach role perception.
8. There is no relationship between the measures of coach effectiveness and tenure.

CHAPTER IV

RESULTS AND DISCUSSION

RESULTS

THE SAMPLE

The data was analyzed in a descriptive sense by obtaining the mean, median and range for the major variables. A description of the data in terms of frequencies, means and so forth will give a detailed picture of the sample.

The average age of the sample studied was 40.52 with a range from 31 years to 60 years. Sage (1972a) in his study of football and basketball head coaches in the United States found their average age to be 40 years. The present study, however, eliminated first year coaches of whom there were 10, or 25 percent of all male C.I.A.U. coaches. It is reasonable to believe that the average age would have been decreased if they had been included. The average University head coaching experience was 9.68 years, which ranged from 2 years to 24 years. Sage and Loy (1973) report that 55 percent of football and basketball coaches in the United States have been head college coaches for less than seven years. As above, if first year coaches had been included, the average head coaching experience would be somewhat less. It is of interest to note that the average beginning University head coaching age for my sample is approximately 30 years of age and that for Sage and Loy (1973) is approximately 32 years. This suggests that the training period for coaches in

the United States is somewhat longer than that for Canadian University head coaches.

With respect to birth place, 17 coaches or 68 percent of this sample were born in Canada; 32 percent were born outside of Canada.

Eighteen coaches were married and 7 were single. Five of the sample were divorced which amounts to 20 percent. Seventeen of the coaches had one or more dependents.

Sage (1973) and Loy and Sage (1972) indicate that almost all college head coaches in the United States have a bachelor's degree and over 70 percent have a Master's degree. In the present sample, 100 percent had bachelor's degrees or equivalent with 32 percent Master's degrees and 16 percent had Ph.D. degrees. It is obvious from this data that Canadian University head coaches are academically less qualified at the Master's level in comparison with United States University coaches. Fourteen of the coaches have tenure and 11 do not. Sixty-four percent were Physical Education specialists and the other thirty-six percent were in other disciplines. Several studies in the United States have shown that anywhere from 70 to 90 percent of high school and college coaches majored in Physical Education as undergraduate students (Arms 1965; Loy and Sage 1972). Fifty-six percent of the sample received their highest degree in Canada. The remainder received their highest degree from outside of Canada.

The average high school playing experience, including junior high was 3.6 years. Eighty-four percent reported playing on teams that won more than half their games. Eighty-four percent had at least 1 year playing experience at University level. The average playing experience at University was 2.9 years with 68 percent having reported playing for winning teams for an average of 2 years.

The idea of centrality of playing position as it pertains to recruitment to head coaching role has been investigated in several studies and was of interest in the present study.

Massengale and Farrington (1977) examined the influence of playing position on the recruitment of major college football coaches. Centers, guards, quarterbacks and linebackers were defined as central playing positions. They found that 65 percent of all head coaches, 63 percent of assistant coaches (including offensive and defensive coordinators), but only 49 percent of assistant coaches were recruited from central playing positions. In short, experience as a player at a central position increases the chances of moving into a head coaching position.

Roy (1974) examined the relationship between centrality of playing position and occupational mobility in the context of professional hockey. Central positions were defined as center and defense, while goaltender and wings were considered peripheral positions. Roy found that 66.7 percent of the managers and 74 percent of the

coaches were recruited from central playing positions. He also found that 76 percent of the captains and 80 percent of the co-captains were selected from central playing positions.

Klonsky (1975) studied the records of 67 coaches who had been professional players to investigate the effects of formal structure on leadership recruitment in basketball. Klonsky defined guards as representing the position of greatest centrality because of their high rate of interaction and the performance of dependent and coordinative tasks. He defines forwards as occupying the most peripheral playing positions and centers as occupying a low interaction position. He found that for his samples of coaches 63.5 percent had been guards, 28.6 percent had been forwards and 7.9 percent had been centers.

Using Klonsky's (1975) criterion for centrality, i.e. guards most central and centers least central, the present study replicated his findings. From this sample 56 percent had been guards, 32 percent had been forwards and 4 percent had been centers. It is, however, to be noted that on a basketball team guards and forwards usually outnumber the centers by 2 to 1 at each position. Therefore, there are fewer players to choose from when recruiting from players occupying the center position. This, needless to say, does not completely account for the huge discrepancy between positions as reported by

this study. There does appear to be a relationship between position played and movement to the head coaching role.

Playing ability in this study was measured by the number of awards won. Forty percent didn't win any awards at high school while the remaining 60 percent won awards ranging from 1 to 6. At the University level 56 percent didn't win any awards and the remaining 44 percent won awards ranging from 1 to 7.

Sixty-four percent had been captain for at least one year during high school, while only 44 percent had been captain for at least one year while at University.

Fifty-two percent reported never having played on a championship team while playing at the University level.

With regards to coaching experience other than University head coaching, 72 percent reported coaching involvement with sports other than basketball for an average of 9 years. Sixty percent reported having been involved with teams that won 50 percent of their games or better. Fifty-two percent of the coaches reported having had experience as assistant coach at the University level for an average of 3.46 years. It is of note that almost half the sample had no such coaching experience previous to their current head coaching position. Also included as experience data was experience as head coach at the high school level. The coaches reported 68 percent had experience as head coach at the high school level for an

average of 5.24 years. Only one reported winning a coaching award at this level. This is due to the fact that most, if not all, regions of Canada do not offer awards for coaching excellence at the high school level. The success of high school coaches was measured by the percentage of wins in league play. Fifty-six percent of the respondents did not reply to this question, possibly because they could not remember. Of the 44 percent who did reply, their average winning percentage was 70 and they won an average of 3.8 championships.

As already noted the University head coaching experience of this sample was 9.68 years. Within this group of head coaches, 36 percent reported winning Coach of the Year awards, either within their conference or nationally. They reported an average winning percentage of 57 for their head coaching years. This ranged from a low of 6 percent to a high of 84 percent. Only 24 percent of the sample reported less than 50 percent wins. This high percentage can be accounted for by the presumption that only successful coaches will remain in coaching. Either they step down or are replaced if they are not successful. Sixty percent reported winning at least one championship. Three coaches reported winning 9 championships.

The practice data revealed that coaches spent an average of 10.8 hours per week in team practice situations. They spent an average of 11 hours per week preparing for

practice and an average of 7 hours per week involved in organizing, promotion and so forth. Their total average weekly involvement during the season was 29.12 hours.

The amount of time spent on basketball related activities in the off season revealed:

1. That coaches spent an average of 102 hours involved in basketball camps.
2. That coaches spent an average of 34 hours attending basketball clinics.
3. That only 40 percent of the coaches were involved with coaching special teams during the off season and they spent an average of 151 hours involved with those teams.
4. That these coaches spent an average of 70 hours organizing and preparing for the following season. This involvement ranged from 5 coaches who reported 0 hours spent in this capacity to 1 coach who reported 240 hours.
5. That these coaches spent an average of 100 hours recruiting for the following season. This ranged from 7 coaches who reported no time spent on this activity to one coach who reported 600 hours.
6. That these coaches spent an average of 48 hours organizing and running a summer basketball league. This ranged from 8 who

reported no involvement with a summer league to 1 who reported an involvement of 200 hours.

7. That these coaches spent an average of 19 hours involved in individual player instruction. This ranged from 14 who reported no involvement in this activity to 1 who reported 90 hours.
8. That some of these coaches participated in basketball related activities other than those mentioned on the questionnaire. They were able to list these activities in an open ended manner. Some of the activities named as taking time during the off season were:
   (a) attendance at banquets and awards dinners,
   (b) viewing game films,
   (c) involvement with minor basketball,
   (d) watching high school and college games,
   (e) scouting and public relations.

   It should be noted that 21 out of 25 repondents did not mention anything in this column of the questionnaire.
9. That these coaches spent an average of 447 hours engaged in basketball related off season activities. This ranged from 1 coach who reported no involvement during off season to 1 coach who reported 1260 hours.

It was of interest in this study to obtain an idea of what the coach felt was his primary role at the University. Fifty-six percent or 14 respondents perceived their primary role to be that of basketball coach. Three respondents could not separate or choose between several roles. For the purposes of this study it was decided that they would not be included in the group which perceived their major role as that of basketball coach.

The Coach Effectiveness Peer Rating Scale, devised for this study, was used to get an indication of who their peers perceived to be the best coaches in Canada. A total of 25 coaches received at least 1 mention as being amongst the top five coaches in Canada. Of the 25 coaches named, 8 did not participate in this study. Of the 8, one was on leave this year and was not coaching; four were first year coaches and were excluded from this study, one returned his responses too late to be included and the other two did not respond at all. From within the sample used for this study, 8 were not named at all and 1 was named 21 times.

The Coach Self Rating Scale measured the respondents perception of his effectiveness on 10 measures associated with the ability to coach. The average total score index was 19.84 which indicates a generally "satisfied" position with regard to these effectiveness measures. The range was from 13 (very satisfied) to 38 (dissatisfied). Naylor

(1976) found an average total score index of 21.06 for his sample of high school football coaches. In comparison with Naylor's (1976) study it would appear that University male basketball coaches are slightly more satisfied with their coaching abilities than are high school football coaches, but generally speaking both groups are satisfied with their abilities.

The Coach Improvement Scale provided data on what factors coaches perceive as actually improving their ability to coach. The mean for the total index was 99.2 with a range of 57 (very helpful) to 148 (no help). These results are consistent with Naylor's (1976) study in that some coaches felt that almost all methods helped them improve, while others felt that very few, if any, actually helped them improve. The mean response per item was 3.006 compared with 3.15 in Naylor's study. The overall average indicates that coaches felt that all items helped them to some degree.

Five items were named most often as being "extremely" to "very" helpful. These were (with average reponse per coach in brackets) as follows:

1. Experience gained during our games. (1.720)
2. Watching game films or tapes involving our team. (1.720)
3. Just thinking about basketball, my team and how to improve what I'm doing. (1.800)

4. Attending basketball coaching clinic presentations. (1.640)
5. Reading notes and papers from coaching clinics. (1.960)

Note in the appendix that scores range from 1 "extremely helpful" to 5 "no help".

Similarily, five items were named most often as being least helpful. These were as follows:

1. Watching N.B.A. games, live. (3.560)
2. Watching teams play other sports. (3.480)
3. Watching N.B.A. games on T.V. (3.480)
4. Watching basketball coaching shows on T.V. (3.520)
5. Watching basketball shows on T.V. other than games. (3.480)

Naylor's (1976) study showed the two most helpful methods were "experience gained during our games" and "just thinking about football, my team, and how to improve it". These are consistent with the findings of this study, generally, as seen above. However, the two methods deemed most helpful by coaches in this study were "Attending basketball coaching clinic presentations" and "experience gained during our games".

Of the methods judged least helpful, "watching N.B.A. games, live", "watching basketball coaching shows on T.V." and "watching basketball shows on T.V. other than games" would provide limited help because of their relative

inaccessibility to Canadian coaches.

An open area was provided for coaches to submit improvement methods that were not included in the questionnaire. Eleven coaches submitted additional items, some of which were: watching other coaches coach their way rather than hearing them at a clinic; coaching at camps and having other coaches question your methods; experiences playing organized basketball and in informal games and scrimmages; attending try-out camps and National team practices; listening to Lou Tice from The Pacific Institute regarding motivation, Psychocybernetics, image building and goal setting; listening to team supporters, spectators, officials and reporters; learning about the other disciplines such as music and business; and the experience of working with Canada's best players through the national team.

The Least Preferred Co-worker (LPC) Scale described earlier in Chapter II was used in this study to measure the motivational style of each coach. Naylor (1976) in his study on high school football coaches found only 3 out of 50 coaches fell into the low LPC, 28 coaches were high LPC and 18 were in the mid-range. In the present study Fiedler's scale was modified to include 7 response blanks rather than 8 and was scored 1-7 rather than 1-8. This, in effect, removes the mid-range group which as yet cannot be explained in a motivational sense (Hunt and Larson, 1977, p. 24). The median for this sample was

57.75 and the range was from 16 (very low) to 112 (very high). It is of note that Fiedler (1976) suggests 57 as the cut off score for low LPC which corresponds to the median of the present sample. This study, however, was not concerned with placing respondents into high or low categories, but was concerned with possible relationships between LPC scores and measures of coach effectiveness as defined in Chapter I.

Naylor states, of his sample which had "higher LPC scores than other sample groups studied" (Naylor, 1976:42).

> Certainly it could be said that most people interested in teaching and coaching look forward to a career which allows abundant opportunity for relating with other people in addition to the technical requirements of the job. Therefore, it would seem logical that those people entering the field of teaching and coaching may be human relations oriented and therefore, view their least preferred co-worker more positively.

The reason for the discrepancy between Naylor's (1976) findings regarding LPC and the present findings could be a result of the difference between the atmosphere in high school as opposed to that of a University. This author suggests that the University setting is close in atmosphere to that of the business and industrial settings and thus the reason why the findings of this study regarding LPC distribution, is closer to "other sample groups studied". The University atmosphere is less personal than the high school atmosphere. In high school teach-

ers are expected to check attendance, report absences to parents, report grades to parents, meet with parents and students on occasion, inform parents of grades and discuss them with parents and students, if necessary. There is a much more personal relationship in the high school setting which possibly accounts for Naylor's findings, as opposed to the present findings. High school teachers are forced through job requirements to make more personal contacts with students. Thus, it is more likely that high school teachers and coaches would be more relationship oriented (high LPC) than University teachers and coaches.

The Group Atmosphere (GA) Scale developed by Fiedler (1967) was used to measure the degree to which the coach felt accepted by his team. McNamara (1968) found that the leader's Group Atmosphere score indicates the degree to which the group is loyal and supportive of the leader, even when the group members do not feel that the leader is very efficient. Chemers and Skrzypek (1972) also found a substantial relationship between sociometric preferences expressed by group members and the leader's GA score. In most cases, the group atmosphere score seems to provide a very quick and valid measure of the leader's feeling of being accepted which may, of course, affect his behavior much more than the degree of actual acceptance by his group. An analysis by Posthuma (1970) of 2415 subjects showed the median GA score for a ten item scale for real-

life groups to be 64.9. The sample used for this study had a mean of 68.2 and a range of 57-80. These are consistent with Naylor's (1976) results which showed a mean of 68.4 with a range of 41 to 80. The fact that these results differ slightly from those of Posthuma (1970) could be due to the fact that both Naylor's (1976) sample and the present sample were successful based on winning 51 percent of their games. Kjeldsen (1976) reports that there appears to be no causal connection between member satisfaction and perceptions of the influence of the coach, but both seemed to be based on winning. A similar explanation appears relevant here, that is, because the teams are successful, the coach's perception of the team atmosphere would be relatively high which is represented by the high median GA score of the present study in comparison to Posthuma's results.

The Coach Attitude Behavior Scale (CAB) developed by Bain (1973) and used by Naylor (1976) was used to measure the degree of authoritarianism exhibited by the coaches in this sample. In order to eliminate the negative values, 4 was added to each item score. Thus an average score of 100 describes authoritarianism; an average score between 75 and 100 shows slight disagreement with authoritarianism and an average score between 100 and 125 would show slight agreement with authoritarianism. For the present study an average score of 86.24 was found indicating a slightly non-authoritarian

attitude or behavior amongst the coaches studied. This is consistent with the data reported by Longmuir (1972), Sage (1972a), Walsh and Carron (1977), Sage (1972b) Bain (1973) and Naylor (1976). It should be noted that these studies have been done in both the United States and Canada.

HYPOTHESES RESULTS

Eight major hypotheses were investigated in this study. Four of these hypotheses were tested by computing Pearson Product Moment Correlation Coefficient for each one and significance was accepted at the .05 level of confidence. The major hypotheses are sub-divided into their various components. Hypothesis 1 revolves around coaching effectiveness as measured by percentage wins and championships won:

Hypothesis 1:A

There is no relationship between coach effectiveness and coach training. This hypothesis was upheld.

Hypothesis 1:B

There is no relationship between coach effectiveness and coach experience. This hypothesis was upheld.

Hypothesis 1:C

There is no relationship between coach effectiveness and coach motivational style. This hypothesis was upheld.

Hypothesis 1:D

There is no relationship between coach effectiveness and coach-player relations. This hypothesis was upheld.

Hypothesis 1:E

There is no relationship between coach effectiveness and time aspect on coaching during the season. This hypothesis was upheld.

Hypothesis 1:F

There is no relationship between coach effectiveness

and time spent on basketball related activities during the off season. This hypothesis was upheld.

Hypothesis 1:G

There is no relationship between coach effectiveness and self rating of ability. This hypothesis was upheld.

Hypothesis 1:H

There is no relationship between coach effectiveness and coach age. This hypothesis was upheld.

Hypothesis 1:I

There is no relationship between coach effectiveness and coach playing experience. This hypothesis was upheld.

Hypothesis 1:J

There is no relationship between coach effectiveness and coach playing ability. This hypothesis was upheld.

Hypothesis 1:K

There is no relationship between coach effectiveness and head coaching experience. This hypothesis was upheld.

Hypothesis 2 revolves around the authoritarianism exhibited by the coach. This hypothesis is sub-divided into its various components, the results of which are stated below:

Hypothesis 2:A

There is no relationship between coach authoritarianism and coach age. This hypothesis was upheld.

Hypothesis 2:B

There is no relationship between coach authoritarianism and head coaching experience. This hypothesis was

upheld.

Hypothesis 2:C

There is no relationship between coach authoritarianism and coach winning percentage. This hypothesis was upheld.

Hypothesis 2:D

There is no relationship between coach authoritarianism and the number of championships won. This hypothesis was upheld.

Hypothesis 2:E

There is no relationship between coach authoritarianism and coach motivational style. This hypothesis was upheld.

Hypothesis 2:F

There is no relationship between coach authoritarianism and coach playing experience. This hypothesis was upheld.

Hypothesis 2:G

There is no relationship between coach authoritarianism and coach playing ability. This hypothesis was upheld.

Hypothesis 2:H

There is no relationship between coach authoritarianism and total basketball coaching experience. This hypothesis was upheld.

Hypothesis 3 revolves around the coaches motivational style as measured by his LPC score. This hypothesis is

sub-divided into its various components, the results of which are stated below:

Hypothesis 3:A

There is no relationship between coach motivational style and time spent on coaching during the season. This hypothesis was upheld.

Hypothesis 3:B

There is no relationship between coach motivational style and time spent on basketball related activities during the off season. This hypothesis was upheld.

Hypothesis 3:C

There is no relationship between coach motivational style and coach self rating of ability. This hypothesis was upheld.

Hypothesis 3:D

There is no relationship between coach motivational style and coach training. This hypothesis was upheld.

Hypothesis 3:E

There is no relationship between coach motivational style and coach-player relations. This hypothesis was upheld.

Hypothesis 3:F

There is no relationship between coach motivational style and coach experience. This hypothesis was upheld.

Hypothesis 3:G

There is no relationship between coach motivational style and coach playing experience. This hypothesis was

upheld.

Hypothesis 3:H

There is no relationship between coach motivational style and coach playing ability. This hypothesis was upheld.

Hypothesis 4:A

There is no relationship between how a coach is rated by his peers and the various measures of coach effectiveness. This hypothesis was rejected on both measures of effectiveness. It was found that there was a positive significant relationship between how a coach is rated by his peers and his winning percentage and the number of championships won. Both measures were significant at the .01 level of confidence with correlations of .5366 (winning percentage) and .4921 (championships won). These results are shown in Table I.

In addition to these major hypotheses, several supplementary hypotheses were tested using Pearson Product Moment Correlation Coefficients. Significance was accepted at the .05 level of confidence.

Supplementary Hypothesis I

There is no relationship between the individual items of the Coach Self Rating Scale and various measures of coach effectiveness. This hypothesis was upheld for all items with the exception of one. It was found that "effectiveness in utilizing talents of assistant coaches" was positively related to the number of championships won.

TABLE I

Pearson Product Moment Correlation Coefficients Between Measures of Coach Effectiveness and Related Inventory Items.

INVENTORY ITEM	PERCENTAGE WINS	CHAMPIONSHIPS WON
1. Coach Peer Rating of Effectiveness	0.5366**	0.4921**
2. Attendance at clinics	-0.3072	-0.3979*
3. Ability to utilize assistant coaches	0.1786	0.3986*
4. Listening to researchers and reading about motor learning	-0.0052	-0.4137*
5. Thinking about basketball, my team and how to improve	-0.0834	0.3955*
6. Discipline easier if player not too close to the coach	0.0981	0.4024*
7. Punish disruptive athletes by acceptable method	-0.0053	0.4169*

*Significant at .05 level.

**Significant at .01 level.

The correlation of .3986 is significant at the .05 level of confidence as indicated in Table I.

Supplementary Hypothesis II

There is no relationship between the individual items of the Coach Improvement Scale and the various measures of coach effectiveness. This hypothesis was upheld for all items with the exception of two. It was found that "just thinking about basketball, my team and how to improve what I'm doing" was positively related to the number of championships won. This means the higher the score on the item the higher the number of championships won. The correlation of .3955 is significant at the .05 level of confidence as indicated in Table I. The other item which was related to the number of championships won was "listening to talks by researchers or reading reports of research studies about motor learning". This item was negatively related to the number of championships won; meaning a low score on the item corresponds to a high number of championships won. The correlation of -0.4137 is significant at the .05 level of confidence indicated in Table I.

Supplementary Hypothesis III

There is no relationship between the individual items of the Coach Attitude Behavior Scale and the various measures of coach effectiveness. This hypothesis was upheld for all except two items. It was found that both items were positively significant at the .05 level of

confidence. This means that coaches who indicate that they agree very much with: "disciplinary action taken by the coach is easier and handled better if the players involved are not personally close to the coach", and "those individual athletes who attempt to disrupt the athletic system must be punished or 'put down' by any acceptable method if available" have been found to win significantly more championships. Results can be seen in Table I.

Supplementary Hypothesis IV

There is no relationship between the individual components of time spent on coaching during the season and the various measures of coach effectiveness. This hypothesis was upheld.

Supplementary Hypothesis V

There is no relationship between the various components of time spent on basketball related activities during the off season and the various measures of coach effectiveness. This hypothesis was upheld with the exception of one item. A negative relationship was found between the numbers of hours attending clinics and the number of championships won. This means generally speaking that the lower the number of hours spent at clinics, the more championships won. The correlation of -.3979 was significant at the .05 level of confidence.

As well as the above hypotheses several other major hypotheses were tested using the Point Biserial Correlation

Coefficient; again significance was accepted at the .05 level of confidence.

Hypothesis 5

There is no relationship between various measures of coach effectiveness and coach role perception. This hypothesis was upheld.

Hypothesis 6:A

There is no relationship between coach authoritarianism and tenure. This hypothesis was upheld.

Hypothesis 6:B

There is no relationship between coach authoritarianism and coach role perception. This hypothesis was upheld.

Hypothesis 7

There is no relationship between coach motivational style and coach role perception. This hypothesis was upheld.

Hypothesis 8

There is no relationship between the measures of coach effectiveness and tenure. This hypothesis was upheld.

DISCUSSION

COACH EFFECTIVENESS CORRELATES

On the basis of the above results, it was determined that no relationships exist between the measures of coach effectiveness (winning percentage and championships won) and leadership style (LPC), degree of authoritarianism (CAB), coach-player relations (GA), coach experience and time spent on coaching in season and out of season. Similar to Naylor's (1976) study, this study did not control for situational favorableness as defined by Fiedler (1967). It is, therefore, not surprising that his Contingency Model cannot be supported by the present study.

As explained earlier in this chapter the coaches in this sample were found to be slightly non-authoritarian and these results are consistent with Naylor's and others noted earlier. At least on the basis of coaches answers on questionnaires, it would seem reasonable to suggest that the authoritarian coaching stereotype, as the route to success, has no scientific basis. It would seem that educating coaches along these lines may improve the enjoyment of sport for the player and the coach.

The fact that no relationship was found between time spent on coaching in season and coach effectiveness is not surprising. There is only a limited amount of time available to the coach because in Canadian Universities most coaches have other job requirements. Therefore,

there is not a wide variation in the amount of time spent on coaching per week during the season. There is also a limited amount of time the player can devote to basketball because of academic and social committments.

The experience data does not relate to coach effectiveness and this is supported by Fiedler and Chemers (1974) who state:

> .....Most studies have failed to show that more leadership training results in better leadership performance, or that trained leaders perform better than untrained leaders, even though studies with negative or indefinite results rarely get published (p. 122).

Fiedler and Chemers (1974) suggest the reason for this is that increasing experience or training can change the favorableness of the situation thus making the leader's style inappropriate for the "new" situation.

Naylor (1976) found significant relationships between "years of head coaching experience" and both winning percentage and championships won. Although unable to support his findings the present study similarly approached significance with regard to a relationship between "years of head coaching experience" and coach age and championships won. Naylor's statement regarding his finding is sufficient to explain the above results:

> It would be expected, however, that in regards to championships won, the longer the tenure in coaching, the more the championship possibilities (p. 50).

Group atmosphere is defined as the interpersonal

relationship between the leader and his group members by Fiedler and Chemers (1974) and seems to be the most important one in determining the leader's power and influence over the group.

Although these perceptions of group atmosphere may be different than the actual feelings of the members of the group, the leader behavior will be much more affected by how he thinks his subordinates feel about him (Fiedler and Chemers, 1974).

This study found no relationship between coach-player relations and coach effectiveness. This finding is the opposite of Naylor's (1976) who found a very high relationship between coach-player relations (GA score) and winning percentage and championships won.

A possible explanation of the difference between this study's finding and Naylor's with regard to coach-player relations and team success could be the level of competition. Naylor's study was of high school coaches and the present study concerns University coaches. It is possible that interpersonal relations are viewed as a more important factor on high school teams, than on University teams. In an investigation of 144 college intramural teams, Martens (1970) reported that high task-motivated teams were more successful than low task-motivated teams. Similarly, McGrath (1962) found, in a study to test the assumption that positive interpersonal relations among teammates results in greater team

effectiveness, that the nonpositive interpersonal relations group (NR) had significantly better markmanship scores and showed significant improvements in markmanship while the positive interpersonal relations (PR) group did not improve. It is, therefore, felt by this author that players of University calibre would be generally more task-motivated relative to high school players; thus explaining the difference in the findings of this study compared to Naylor's. It should be noted, however, that the task orientation was not strong enough to produce negative relationships in the present study.

COACH AUTHORITARIANISM CORRELATES

Bain (1973) found that the younger the coach, the more authoritarian were his tendencies. His study concerned high school coaches of football and basketball in Edmonton, Canada. Naylor (1976) found no relationships between scores on the CAB scale and age. Naylor's sample, however, included coaches above the high school level. The present study found no relationship between coach age and authoritarianism. It is felt by this author that the results of Naylor's study and the present study do support Bain's conclusion that as a coach gains experience, his coaching style becomes more democratic. The coaches in this study are older (40 years) than Bain's (29 years) and have thus grown out of their authoritarian ways to a large extent. It should be noted, however, that they

have not moved so far to the democratic side that a relationship exists in the opposite direction to Bain's (1973).

A surprising finding, to this author, in the present study is that no relationship exists between coach motivational style (LPC) and coach authoritarianism. This is consistent with Naylor's (1976) results. Intuitively, the low LPC (task-oriented) coach should be related to the authoritarian coach in that the definition of the task-oriented individual closely resembles the accepted definition of the authoritarian individual.

Fiedler, Chemers and Mahar (1976) describe the task-motivated leader as a "no-nonsense" person, "impatient to get the job done" and "generally not very concerned or oriented toward interpersonal problems and generally not too attuned to interpersonal conflict" (p. 11).

The problem could lie in the validity of the CAB scale developed by Bain (1973). However, Bain (1973) concluded on the basis of the statistical evidence he obtained that coaching attitudes and behavior expressed in the CAB scale may be a manifestation of both general and right wing authoritarianism. This conclusion was reached on the strength of the highly significant relationships between the CAB scale and the Dogmatism or D Scale (.606 significant at the .01 level of confidence) and the California F Scale (.742 significant at the .01 level of confidence).

The answer, however, seems to lie with the LPC Scale. Fiedler and Chemers (1974) state:

> For nearly 20 years, we have been attempting to correlate it (LPC) with every conceivable personality trait and every conceivable behavior observation score. By and large these analyses have been uniformly fruitless (p. 74).

SUPPLEMENTAL FINDINGS

A perennial problem surfaces whenever a study such as the present one is undertaken. The problem of how to measure group or team effectiveness. In almost all, if not all, studies to date concerning sports teams, winning percentage or championships won has been used to measure team effectiveness and/or coach effectiveness. Is this a fair way to evaluate coaching ability? In an effort to answer this question the Coach Peer Rating Scale was developed by the author to investigate whether or not coaches rate their peers, either consciously or unconsciously, on the basis of winning percentage or championships won. Coaches were given a score on the scale on the basis of how often they were mentioned by other coaches throughout the country and these scores were correlated with the winning percentage and championships won data. Both measures were found to be significantly related to peer ratings. Peer rating was positively related to winning percentage (.5366 significant at the .01 level). Peer rating was positively related to championships won (.4921 significant at the .01 level). The suggestion

from this author is that coaches rate other coaches' effectiveness on the basis of winning percentage and championships won.

Another question of interest in the present investigation was that of coach role perception. It was felt that, because most Canadian University male basketball coaches fulfill dual roles as part of their job, coaches who perceive their major role as that of coach might tend to be more successful than those who see their major role as that of administrator or educator. This study found no difference in the effectiveness of the coach regardless of his role perception. A possible explanation for this, other than there being no difference, is that role perception is unimportant because the workload is divided such that regardless of role perception, there is not enough extra time to devote to the coaching role to produce any significant changes in success patterns.

It was felt that there might be a relationship between coach authoritarianism and whether or not the coach had tenure at the University. As mentioned in Chapter II, Fodor (1976) found that supervisors subjected to group stress revealed in their leadership behavior a greater tendency toward authoritarian modes of control. It was felt that possibly coaches without tenure would feel more stress and thus behave in a more authoritarian manner then coaches with tenure. This was not the case. No relationship was found between tenure and coach authoritarianism.

A possible explanation of this result lies in the fact that most Canadian Universities, to date, put very little pressure on coaches to produce winning teams. Should this change in the future, a possible re-examination of this hypothesis might be interesting.

The fact that no relationship was found between the measures of coach effectiveness and tenure in this study would have a similar explanation as above; that is, the production of winning teams is not, at present, viewed as a very important criterion for employment at the University level. Tenure of the coach does not depend upon his won-loss record.

When the various items of the Coach Self Rating Scale were individually correlated with the measures of coach effectiveness, the only significant relationship was between "effectiveness in utilizing talents of assistant coaches" and championships won. This relationship was positive meaning a high score on the item scale corresponds to a high number of championships won. A high score on the Coach Self Rating Scale would be "dissatisfied-4" or "very dissatisfied-5". Thus, the tendency would be that the coach who won many championships would be "dissatisfied" with his "effectiveness in utilizing assistant coaches". The author feels this relationship should be treated with caution, in that it may be a result of the assistant coaching situation in Canadian Universities. The assistant coaching situation in Canadian Universities is

such that there is no permanance. Often these roles are filled by Graduate students who are around only one or two years. As a result, some years there is an assistant and other years there isn't. When one looks at the questionnaire an answer of "unsure-3" would be significantly higher than the average answer per item which was 1.9. The "unsure" answer by many coaches could merely mean they haven't had an assistant coach and therefore, don't know how effectively they could utilize his talents.

When various items of the Coach Improvement Scale were correlated with the measures of coach effectiveness, only two significant relationships were found:

1. "Just thinking about basketball, my team and how to improve what I'm doing" was positively related to the number of championships won. This means that a coach who finds the above method "extremely helpful-1" in improving his coaching wins fewer championships. This relationship can easily be explained in that many teams have successful winning seasons only to lose the championship game. It is most likely that the coach of such a team will at that time begin thinking about his team, basketball and "how to improve what I am doing".
2. "Listening to talks by researchers or reading reports of research studies about motor

learning" was negatively related to the number of championships won. This means that the coach who finds the above method "extremely helpful-1" in improving his coaching, wins more championships. A possible explanation for this finding is that coaches who are more acquainted with the area of motor learning are better able to instruct their players in the techniques of the game; thus when involved in championship games where stress can cause breakdown in skill execution, the team which has acquired its skills as a result of the coach's understanding of motor learning can possibly execute better and, therefore, be victorious.

When various items of the Coach Attitude Behavior Scale were correlated with the measures of coach effectiveness, only two significant relationships were found:

1. "Disciplinary action taken by the coach is easier and handled better if the players involved are not personally close to the coach".
2. "Those individual athletes who attempt to disrupt the athletic system must be punished or "put down" by any acceptable

method if available".

These statements were positvely related to the number of championships won. This means that coaches who "agree very much" with these statements win more championships than those who don't agree. A possible explanation for this finding is that, since both statements refer to disciplining players, coaches who take action against disrupting players are more likely to have a "team" which can survive the rigors and stress of play-off competition, more so that teams whose coaches do not take such action. Since these actions aren't related to winning percentage in this study, it is suggested that teams with disruptive players can be successful in a percentage sense, but have trouble during championship play.

When the various components of "time spent on basketball related activities during the off season" were correlated with the measures of coach effectiveness, only one significant relationship was found. A negative relationship was found between the number of hours attending clinics and the number of championships won. This means the lower the number of hours spent at basketball clinics, the more championships won. The explanation for this finding seems quite straight forward. Since attendance at clinics is not related to winning percentage, it would seem that coaches who are unsuccessful or successful in a won-loss sense, but fail to win champion-

ships, spend more time attending clinics hoping to improve their knowledge, which they feel will, in turn, increase the likelihood of their winning more championships.

The present study yielded a number of interesting results regarding Canadian Interuniversity Athletic Union male basketball coaches. It is, to the author's knowledge, the only study of it's kind on the above named population. It is hoped that the results and discussion provided will stimulate knowledge and understanding concerning the role of the Canadian University male basketball coach.

CHAPTER V

SUMMARY AND CONCLUSIONS

SUMMARY

The purpose of this study was to examine the leadership effectiveness of Canadian Interuniversity Athletic Union male basketball coaches to try and determine what factors, if any, separated successful coaches from unsuccessful coaches. Success was determined by percentage of games won in league play and the number of championships won.

Twenty-five coaches with at least two years head coaching experience at the University level answered questions concerning various aspects of their coaching role (Appendix B). The questionnaire provided data on their training, experience, leadership style, relations with the team members, role perception, rating of peers and self-rating of effectiveness.

The general characteristics of the group were provided by descriptive data. This data showed that the average age of the coaches was 40 years and that 32 percent were born outside of Canada. Their average head coaching experience was 10 years and 100 percent had at least a bachelor's degree or its equivalent. Sixty-four percent were physical education specialists. Eighteen were married and 17 had at least one child. Twenty percent of the sample had been divorced. Thirty-six percent reported winning at least one coaching award

during their head coaching years. Fourteen of the coaches had tenure at their University.

The following general hypotheses were formulated and tested in order to carry out the purposes of the study:

1. There is no relationship between the measures of coach effectiveness and leadership style, degree of authoritarianism, coach-player relations, coach experience and time spent on coaching in season and out of season.
2. There is no relationship between coach authoritarianism and leadership style, coach age, head coaching experience, playing experience, playing ability and coach effectiveness measures.
3. There is no relationship between coach motivational style and coach training, coach experience, coach-player relations, time spent on coaching in season and out of season, and the playing ability and playing experience of the coach.
4. There is no relationship between peer rating of effectiveness and the measures of coach effectiveness defined by this study.
5. There is no relationship between the

measures of coach effectiveness and tenure and coach role perception.

6. There is no relationship between coach authoritarianism and tenure and coach role perception.
7. There is no relationship between coach motivational style and coach role perception.

Hypotheses one to four above were tested using Pearson Product Moment Correlation Coefficients while hypotheses five to seven were tested using Point Biserial Correlation Coefficients. Significance was accepted at the .05 level of confidence.

CONCLUSIONS

On the basis of the analysis of the data, the following conclusions are drawn:

1. No relationship exists between the measures of coach effectiveness and leadership style, degree of authoritarianism, coach-player relations, coach experience and time spent on coaching in season and out of season.
2. No relationship exists between coach authoritarianism and leadership style, coach age, head coaching experience, playing experience, playing ability

and coach effectiveness measures.

3. No relationship exists between coach motivational style and coach training, coach experience, coach-player relations, time spent on coaching in season and out of season, and the playing ability and playing experience of the coach.
4. There is a positive relationship between a coach's rating of ability by his peers and his winning percentage and the number of championships he has won.
5. No relationship exists between the measures of coach effectiveness and coach role perception and coach tenure.
6. No relationship exists between coach authoritarianism and tenure and coach role perception.
7. No relationship exists between coach motivational style and coach role perception.

IMPLICATIONS

On the basis of the literature reviewed (Chapter II) and the results of the present study, it would seem appropriate to begin searching for another route to understanding coaching effectiveness other than having coaches fill in questionnaires. This cheap, quick and

easy method of study has turned up so many inconsistent findings, so as to suggest that there are just too many uncontrolled variables. How a coach feels at the particular moment that he answers the questionnaire can have a great bearing on how he answers. The interpretations, made by coaches, of the questions can differ. How seriously one answers the questions can certainly influence the way in which they are answered. The questionnaires are often filled out quickly, without sufficient time to think about the responses. It has been noted that the first reaction is usually the best answer, but is it necessarily so? The author, attempting to fill out the LPC scale, fell into the high LPC category, but later he remembered another person with whom he least enjoyed working. A reassessment of the LPC put the author into the low category. This example is presented to show an inconsistency in one of the most validated scales used in leadership theory and also used in the present study. A number of the questions involved the use of memory. Thus the results could depend on how well the respondent could remember details of his coaching career.

Fiedler's model of leadership effectiveness seems to include most of the basic ingredients for leadership study, but it is perhaps too rigid. Athletics and coaching are full of emotion; reactions are not always calculated. Often stress and anxiety are extremely high ,

it is not easy to predict reactions consistently during such times. Therefore, the author suggests that possibly a theory of coaching effectiveness would be much more meaningful than studying coaching effectiveness in light of leadership effectiveness.

This study provides further evidence that the authoritarian style of coaching is over-rated and possibly out-dated. The coaches in this study were on the average slightly non-authoritarian by their answers to the questionnaire and degree of authoritarianism was unrelated to success. It is the belief of the author that some coaches adopt this style because they feel it will provide a better chance of success. Some of these coaches are unsuited for this style and it usually has the opposite effect, that is, it produces failure. It is the belief of this author that coaches should objectively view their role and try to incorporate ideas and systems within their own style, rather than trying to fulfill the "coaching stereotype".

Another implication of this study is that coaches rate other coaches on the basis of their won-loss record and their number of championships won. Although it is often stated that the winning coach doesn't necessarily do the best coaching job and there are always other interacting variables, generally speaking, this study shows that coaches rate each other relative to their winning percentage and championships won. It therefore

seems reasonable that if coaches rate each other's success on the basis of these variables, researchers can also use these variables as measures of coaching performance. It should also be noted that the correlations in this category would probably have been even higher except that there seems to be a bias operating here. The top three mentioned coaches were of Canadian origin and although some other coaches of foreign birth, have had better winning percentages and won more championships, their names did not appear as often as would be expected. This is probably a result of their recruiting practices which are still philosophically opposed by many Canadian born coaches. This particularly applies to the recruiting of American born players.

This suggests that even though coaches rate each other on the basis of winning percentage and championships won, they do not, generally, rate coaches highly if it is believed that their high winning percentage and high number of championships won are a result of the recruitment of American born players, rather than the coach's ability to coach.

One of the most difficult problems in sport is whether or not the team with the best players always defeats the team with less skilled players. Further studies of coaching effectiveness should try to take into consideration the abilities of the athletes. Sure we are all aware of "upsets", but maybe, sometimes, upsets aren't

really upsets. Sometimes the "underdog" has better players. How closely matched in ability do two teams have to be, skillwise, in order for coaching to be a factor in winning or losing?

This study shows no relationship between past coaching experience and success. This is consistent with other findings discussed earlier (Chapter IV). This suggests a very difficult job for Athletic Directors who are hiring coaches for University jobs. Coaches' past experience seems unrelated to success, therefore, it would seem that management would have to weigh very carefully many variables other than the past record of the coach. It seems reasonable that any coach hired by a University will have a successful past record. Since past experience seems unrelated to success, other facotrs must be at work. Some of these could be: the ability of the coach, the skill of the players on the team, the rules of the conference or even the philosophical beliefs of the coach, especially regarding recruiting. This last one may indeed be the most important reflection of success. In Canada, recruiting is not accepted to the extent that it is in the United States. Therefore, many coaches at present are ambivalent regarding recruiting. They feel they have to do it to be successful, but they are not completely committed to it as a philosophy. Certainly in many Canadian Universities, the professional or academic restrictions handicap recruiting regardless

of how the coach feels.

In the final analysis, at present in Canada, perhaps the best way to rate coaching effectiveness is in a subjective manner. The setting up of scientific controls to measure coaching effectiveness objectively is practically impossible because of the many uncontrollable variables that have already been mentioned.

RECOMMENDATIONS

1. Studies should be done on University coaches of other sports to ascertain whether or not the results of the present study are sport specific.
2. Serious consideration should be given to abandoning studies of coaching leadership based on scales and inventories developed mainly for business and industry. There is, in this author's view, a tremendous psychological difference between being a member of a sports team and being a member of a business or industrial group.
3. Because sport is full of emotion and stress, it would be interesting to apply House's (1976) theory of charismatic leadership to a study of coaches.

4. Campbell (1977) suggests:

> We are in grave danger of transforming the study of leadership to a study of self-report questionnaire behavior, if indeed, the transformation hasn't already occurred. The method is too quick, too cheap, and too easy, and there are now many such questionnaire measures that possess no construct validity whatever (p. 229).

More studies of coaches should be of the observational type, so that it can be seen what they do rather than what they say they do.

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APPENDIX A

CORRESPONDENCE

Letter Seeking Coaches Assistance in Carrying Out the Study

Dept. of Athletic Services,
University of Alberta,
EDMONTON, Alberta,
January 31, 1979.

Dear

I am presently the assistant basketball coach at the University of Alberta and have coached basketball for the past nine years at Oak Bay High School in Victoria, B.C.

I am doing graduate work in the area of sport psychology at U. of A. under the assistance of Dr. Rick Alderman.

I am proposing to do my Master's thesis on "Leadership Effectiveness Among C.I.A.U. Male Basketball Coaches". A fair amount of work in this area has been done on high school coaches in basketball and other sports, both here and in the United States, but very little work has been done on University coaches in Canada. It is hoped that research in this area will provide guidelines for understanding and improving coaching effectiveness in the University basketball situation in Canada.

Your replies will be held in the utmost confidence. It is statistics only that is of interest in assessing patterns of leadership displayed by University coaches in Canada.

My purpose in writing to you is to ask you to take twenty minutes to participate in this study. With only 34 coaches available I need to have close to 100% co-operation if this study is to be useful. I would like to have the questionnaire returned to me by March 2, 1979.

I realize that this is a very busy time of year for you, but I hope you will find time to help me with what I feel could be a worthwhile study. It is only through the co-operation of people such as you that research into the area of sport psychology and coaching can be furthered.

I have enclosed a stamped, self-addressed envelope for returning the information required. If you have some questions about the questionnaire you could make a note of it on the questionnaire itself and I will endeavour to see you during the C.I.A.U. Championship at Calgary to clarify any difficulties.

Thank you in advance for your assistance and the

best of luck for the remainder of the season.

Sincerely,

DONALD G. HORWOOD

Letter Thanking Coaches For.Their Participation

Dept. of Athletic Sciences,
University of Alberta,
Edmonton, Alberta,
June 15, 1979.

Dear Coach,

Thank you very much for participating in my study of Leadership Effectiveness Amongst Male C.I.A.U. Basketball Coaches.

Eighty-six percent of the coaches returned their questionnaires which is a very high percentage for this type of study. I realize that for most of you it's a hassle to fill out these forms, so again I thank you sincerely for your co-operation.

Included is the abstract from my thesis, and I hope that this work will help dispell some myths regarding coaching success. My thesis will be on file at the Coaches Association of Canada office if you wish a more detailed description of my study. Otherwise, please feel free to contact me at:

2365 McNeill Avenue
Victoria, B.C.
V8S 2Z2, after July 1, 1979, if you have any questions.

Yours in basketball,

DONALD G. HORWOOD

APPENDIX B

QUESTIONNAIRE

Coach Background Information

PART A Personal Data

1. Name:_____ Date of Birth:_____

   Place of Birth:_____

2. Marital Status: Category and number of years if applicable.

   Single:_____

   Married: _____

   Divorced or Separated:_____

   Widower:_____

3. Dependents:_____

4. Do you have tenure:_____

PART B Training Data

1. Educational Data

Degree or Diploma	Specialization if any	Institution or City	Year Granted

2. Basketball Playing Experience

LEVEL	NO. OF YEARS	POSITION PLAYED	AWARDS eg.MVP	CAPTAIN NO. OF YRS.	WINNING YEARS-51%	LEAGUE CHAMPIONS
High School						
College						
University						
Professional						
Other						

3. Basketball Assistant Coaching Experience

LEVEL	NUMBER OF YEARS	COACHING AWARDS	WINNING YEARS -51% OF GAMES	LEAGUE CHAMPIONS
High School				
College				
University				
Other				

4. Other Coaching Experience

SPORT eg. SOCCER	LEVEL eg. JR. HIGH	NO. OF YEARS	POSITION eg. HEAD OR ASSIST.	WINNING YEARS 51% OF GAMES	LEAGUE CHAMPIONS

PART C Experience Data

1. Head Coach Experience (Basketball)

LEVEL	NUMBER OF YEARS	COACHING AWARDS	OVER-ALL LEAGUE WON-LOST RECORD	LEAGUE OR POST LEAGUE CHAMP-IONSHIPS WON
High School College University Other				
TOTALS				

2. How much time do you spend on coaching basketball during the season?

   (a) Total time spent in practice not including preparation time:

   Hours per week:_____

   (b) Total time spent in preparing for practice and games:

   Hours per week:_____

   (c) Other (organizing, promotion)_____

3. How much time do you spend on basketball related activities in the off season?

	hrs. per day	total days
(a) basketball camps		
(b) clinics		
(c) coaching special representative teams		
(d) organizing for the following season		

	hrs. per day	total days
(e) recruiting for the following season		
(f) organizing and/or running summer league		
(g) individual player instruction		
(h) other_____		
_____		

4. I perceive my major role at this University as: (check one only)

(a) basketball coach _____
(b) administrator _____
(c) educator _____
(d) other_____

PART D Coach Effectiveness Peer Rating

1. I feel the 5 best coaches in Canadian University Basketball are: (regardless of won-lost record) do not include yourself.

1._____
2._____
3._____
4._____
5._____

PART E Instruments

1. Coach Self Rating Scale

How would you rate your ability or effectiveness as a head coach in the following categories? Please circle your response using the following scale.

1-Very satisfied 2-Satisfied 3-Unsure

4-Dissatisfied 5-Very Dissatisfied

Technical knowledge of the game.	1	2	3	4	5
Teaching ability.	1	2	3	4	5
Organizational ability.	1	2	3	4	5
Ability to motivate.	1	2	3	4	5

Interpersonal relation with team members.	1	2	3	4	5
Ability to select and position players.	1	2	3	4	5
Effectiveness in terms of making basketball an enjoyable experience for your players.	1	2	3	4	5
Effectiveness in terms of team morale.	1	2	3	4	5
Effectiveness in utilizing talents of assistant coaches.	1	2	3	4	5
Effectiveness in maintaining harmony on the coaching staff.	1	2	3	4	5

2. Coach Improvement Scale

Your coaching abilities are improved from season to season in a number of ways. We are interested in what you do personally that in your opinion helps you improve most. Please circle the appropriate number in each case. If you feel you cannot respond to any question, just leave it blank. If you have never or very seldom done the particular thing in any item, please circle "5" for "No Help".

REMEMBER: INDICATE WHAT HAS ACTUALLY HELPED YOU IMPROVE, NOT WHAT YOU THINK SHOULD OR MIGHT HELP.

1-Extremely Helpful 2-Very Helpful 3-Helps Some

4-Little Help 5-No Help

1. Experience gained during our practices.	1	2	3	4	5
2. Experience gained during our games.	1	2	3	4	5
3. Talking with basketball coaches on our team.	1	2	3	4	5
4. Talking with basketball coaches on other teams.	1	2	3	4	5
5. Talking to coaches in other sports.	1	2	3	4	5
6. Talking to our players or ex-players.	1	2	3	4	5
7. Watching other amateur teams play, live.	1	2	3	4	5

8. Watching N.B.A. games, live.	1	2	3	4	5
9. Watching other teams practice basketball.	1	2	3	4	5
10. Watching teams play other sports.	1	2	3	4	5
11. Watching N.B.A. games on T.V.	1	2	3	4	5
12. Watching American college basketball on T.V.	1	2	3	4	5
13. Watching Canadian I.A.U. basketball on T.V.	1	2	3	4	5
14. Watching basketball coaching shows on T.V.	1	2	3	4	5
15. Watching basketball shows on T.V. other than games (eg. weekly hi-lites, special features about basketball).	1	2	3	4	5
16. Watching instructional basketball films or tapes.	1	2	3	4	5

RECALL AGAIN: YOUR ANSWERS SHOULD INDICATE WHAT HAS ACTUALLY HELPED YOU IMPROVE, NOT WHAT YOU THINK SHOULD OR MIGHT HELP.

17. Watching game films or tapes involving our team.	1	2	3	4	5
18. Watching game films or tapes not involving our team.	1	2	3	4	5
19. Just thinking about basketball, my team and how to improve what I'm doing.	1	2	3	4	5
20. Attending basketball coaching clinic presentations.	1	2	3	4	5
21. Reading notes and papers from coaching clinics.	1	2	3	4	5
22. Reading basketball <u>books</u> about techniques and strategy.	1	2	3	4	5
23. Reading articles in magazines or periodicals about techniques and strategy.	1	2	3	4	5
24. Reading <u>books</u> written by pro basketball players or coaches about their experiences.	1	2	3	4	5

25. Reading basketball books about great coaches.	1	2	3	4	5
26. Reading books about the psychology of coaching.	1	2	3	4	5
27. Reading magazines or periodicals about the psychology of coaching.	1	2	3	4	5
28. Reading books on general psychology.	1	2	3	4	5
29. Reading magazines or periodicals about sport in general, including basketball.	1	2	3	4	5
30. Reading magazines or periodicals on general psychology.	1	2	3	4	5
31. Listening to talks by researchers or reading reports of research studies about:					
a. psychology of coaching	1	2	3	4	5
b. physiology of exercise	1	2	3	4	5
c. motor learning	1	2	3	4	5
d. biomechanics or kinesiology	1	2	3	4	5
e. training techniques	1	2	3	4	5
32. My experience as a teacher of physical education ... if you teach or have taught physical education.	1	2	3	4	5
33. My experience coaching other sports.	1	2	3	4	5
34. If you think you have gained improvement out of something not included in this list, please describe it in the space below:					

Instructions for LPC and group atmosphere scores and sample scales

People differ in the ways they think about those with whom they work. This may be important in working with others. Please give your immediate, first reaction to the items on the following two pages.

On the following sheet are pairs of words which are opposite in meaning, such as Very Neat and Not Neat. You are asked to describe someone with whom you have worked by placing an "X" in one of the eight spaces on the line between the two words.

Each space represents how well the adjective fits the person you are describing, as if it were written:

Very Neat:	___ :	___ :	___ :	___	___ :	___ :	___ :	___	:Not Neat
	8	7	6	5	4	3	2	1	
	Very Neat	Quite Neat	Some-what Neat	Slightly Neat	Slightly Untidy	Some-what Untidy	Quite Untidy	Very Untidy	

For example: if you were to describe the person with whom you are able to work least well, and you ordinarily think of him as being quite neat, you would put an "X" in the second space from the words Very Neat, like this:

Very Neat:	___ :	X :	___ :	___	___ :	___ :	___ :	___	:Not Neat
	8	7	6	5	4	3	2	1	
	Very Neat	Quite Neat	Some-what Neat	Slightly Neat	Slightly Untidy	Some-what Untidy	Quite Untidy	Very Untidy	

If you ordinarily think of the person with whom you can work least well as being only slightly neat, you would put your "X" as follows:

Very Neat:	___ :	___ :	___ :	X	___ :	___ :	___ :	___	:Not Neat
	8	7	6	5	4	3	2	1	
	Very Tidy	Quite Tidy	Some-what Tidy	Slightly Tidy	Slightly Untidy	Some-what Untidy	Quite Untidy	Very Untidy	

If you would think of him as being very untidy, you would use the space nearest the words Not Neat.

Very Neat:									Not Neat
	8	7	6	5	4	3	2	X 1	
	Very Tidy	Quite Tidy	Some-what Tidy	Slightly Tidy	Slightly Untidy	Some-what Untidy	Quite Untidy	Very Untidy	

Look at the words at both ends of the line before you put in your "X". Please remember that there are no right or wrong answers. Work rapidly; your first answer is likely to be the best. Please do not omit any items, and mark each item only once.

3. Least Preferred Co-worker (LPC) Scale

Now think of the person with whom you can work least well. He may be someone you work with now, or he may be someone you knew in the past. He could be a player.

He does not have to be the person you like least well, but should be the person with whom you had the most difficulty in getting a job done. Describe this person as he appears to you.

Pleasant	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Unpleasant
Friendly	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Unfriendly
Rejecting	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Accepting
Helpful	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Frustrating
Unenthu-siastic	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Enthusiastic
Tense	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Relaxed
Distant	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Close
Cold	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Warm
Coopera-tive	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Uncooperative
Supportive	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Hostile
Boring	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Interesting
Quarrel-some	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Harmonious
Self-Assured	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Hesitant
Efficient	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Inefficient
Gloomy	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Cheerful
Open	:	___	:	___	:	___	:	___	: ___ : ___ : ___ : ___ : Guarded

4. Group Atmosphere (GA) Scale

Describe the general atmosphere of your team over all your head coaching years by checking the following items:

	8	7	6	5	4	3	2	1	
1. Friendly	:	:	:	:	:	:	:	:	:Unfriendly
2. Accepting	:	:	:	:	:	:	:	:	:Rejecting
3. Satisfying	:	:	:	:	:	:	:	:	:Frustrating
4. Enthusiastic	:	:	:	:	:	:	:	:	:Unenthusiastic
5. Productive	:	:	:	:	:	:	:	:	:Nonproductive
6. Warm	:	:	:	:	:	:	:	:	:Cold
7. Cooperative	:	:	:	:	:	:	:	:	:Uncooperative
8. Supportive	:	:	:	:	:	:	:	:	:Hostile
9. Interesting	:	:	:	:	:	:	:	:	:Boring
10. Successful	:	:	:	:	:	:	:	:	:Unsuccessful

5. Coach Attitude Behavior (CAB) Scale

Instructions

The following statements are based upon situations and specific problems with which coaches sometimes must concern themselves. The best answer to each statement is your personal choice. I have tried to cover a wide variety of coaching questions. You may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many coaches feel the same as you do. Please base your opinions upon your feelings and your actual behavior with respect to your coaching experience.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1	I agree a little	-1	I disagree a little
+2	I agree on the whole	-2	I disagree on the whole
+3	I agree very much	-3	I disagree very much

1. It is best to maintain a large social distance from the players in order to maintain a high level of authority.

2. Coaches should be concerned with discovering the individual athletes who violate team or social rules.

3. The players should always realize that coaches are

the boss whether or not they are right and their decisions or regulations should never be questioned.

4. The coach has the right to set all rules and regulations and anyone who violates these rules must be disciplined.

5. The coach has enough problems trying to achieve a high performance level from his athletes and should not overly concern himself with an individual athlete's problem.

6. Players should report all grievances to the captain of the team in order that he may report them to the coach.

7. The best way to eliminate mistakes is to make the players do pushups, laps or any form of physical exercise so that he will remember his mistakes and won't make them again.

8. Most players are motivated by threats of punishment such as laps, pushups, etc.

9. Players are motivated by threats of demotion or of expulsion from the team.

10. Disciplinary action taken by the coach is easier and handled better if the players involved are not personally close to the coach.

11. Coaches should get to know their players slightly, but should not become friendly or warm with them.

12. Players should realize that the coach knows more than they do in the particular sport and should never ask "why?".

13. A well disciplined team on and off the playing field or court usually has a better performance record.

14. A well disciplined team makes the coach look better to the community at large.

15. A rigid relationship with an athlete on and off the court should be one of the methods used by coaches to maintain respect and jursidiction a coach deserves and needs in order to best perform his duties as coach.

16. A coach who is too friendly with his players and does not remain somewhat detached from them is apt to lose his position of influence over the athlete.

17. A coach should always keep his over all won-lost record in mind in order to see if his athletes view him as successful or not.

18. Coaches and Athletic administrators should continually be aware of those who are attempting to undermine the system of athletics whether they are athletes or not.

19. Those individual athletes who attempt to disrupt the athletic system must be punished or "put down" by any acceptable method if available.

20. A coach should refrain from taking extreme positions in any aspect of social or professional behavior because he must set a conservative example to his players and to other coaches.

21. A coach should organize himself to the point that there can be absolutely no question in his mind or his athletes' minds about what is occurring whether it be during a game, during practice, or during a road trip.

22. Athletes recognize the position of authority of the coach and respond to forceful and direct criticism or threat of criticism in a desired direction.

23. Discipline in athletics helps create model citizens or at the least helps develop individuals to take meaningful and worthwhile positions in society.

24. If more people would participate in athletics, they would be better able to discipline themselves in everyday life because of discipline they receive in sport.

25. Players should not be encouraged to come and talk to the coach about problems in the offense or defense because this is the coaches concern. The athlete should be concerned with perfecting his techniques within the system.